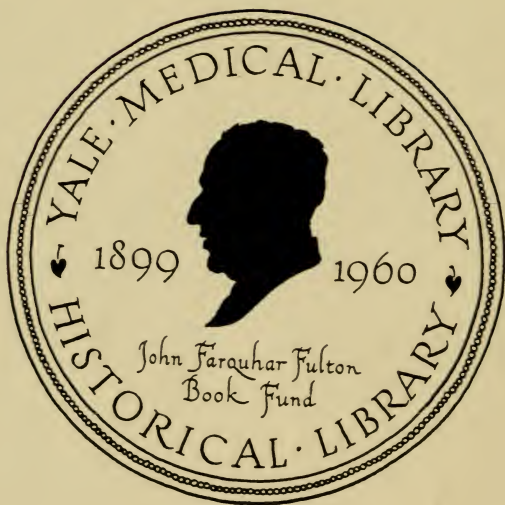


DISCOURSES TO WOMEN
ON
Medical Subjects,

BY
MRS. A. M. LONGSHORE-POTTS, M.D.







DISCOURSES TO WOMEN

ON

MEDICAL SUBJECTS.

ENTERED AT STATIONERS' HALL, ENGLAND.

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M. Longshore Pk.

DISCOURSES TO WOMEN

ON

Medical Subjects :

BY

MRS. ÷ A. ÷ M. ÷ LONGSHORE-POTTS, ÷ M.D.,

A GRADUATE OF THE WOMEN'S MEDICAL COLLEGE
OF PHILADELPHIA, U.S.A.

ENGLISH EDITION. TWENTIETH THOUSAND.

London :

PUBLISHED BY THE AUTHOR,
32, DORSET SQUARE, N.W.

1887.

Price 7s. 6d.

KING, SELL, & RAILTON
PRINTERS,
12, GOUGH SQUARE, FLEET STREET, E.C.



19th
cent
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L76
1087

A Tribute

To the sacred memory of my beloved brother, Joseph S. Longshore, M.D., of Pennsylvania, U.S.A., whose life, energy, and means were largely devoted to philanthropic and humanitarian works, among which stood most prominent the Medical Education of Women. Through his indomitable perseverance and indefatigable efforts to overcome the imposing barriers of ignorance and custom-bound prejudice ; by his logical discussions, both in private and public ; and by his personal influence over the minds of individual members of the Legislative body of the State, in which he resided, he succeeded in securing the legal charter for the Women's Medical College, which is located in Philadelphia, and thereby he became one of the principal founders of this institution, and for some years, until other cares and responsibilities prevented, he held the Professorship over the branches of Obstetrics and the Diseases of Women and Children.

This was the first regularly chartered medical institution in the world where women could enjoy all the advantages and immunities which hitherto had been accorded only to

the opposite sex in similar colleges, and where they could be prepared as eligible candidates for the degrees of medicine on an equality with men. And for this, one of the greatest boons which could have been conferred upon them as an entering wedge to open to them the means for promoting increased health and happiness among their own sex, all women in every land and in every clime, and all female physicians, owe to him the just debt of lasting gratitude ; and to whom I, with profound regard and heartfelt thanks, humbly dedicate this book.

P R E F A C E .

FROM my earliest experience, as a thinking, responsible being, I have been convinced of the great need for physiological instruction among women, to enable them to live so as to avoid the many causes of disease to which they are susceptible; and it was through the earnest desire of my devoted father to have me qualified to be self-sustaining and financially independent, as a protection against the reverses of fortune, added to the encouragement and persuasive arguments of my dear brother, Dr. Joseph S. Longshore, that I was induced to become one of the first to enter the "Women's Medical College of Pennsylvania," which he so heroically laboured to establish, there to become

prepared to take an active part in life's earnest work among the afflicted. And never, since I left that institution, with the armour of its sanction and fortified by its credentials as a regular graduate, have I had cause to regret the course I had pursued ; but, on the contrary, there has been an increasing desire, corresponding with the growing necessity, to advance the cause of woman's physical improvement in every possible practical manner.

Soon after I entered this new field of useful labour, in the practice of the healing art, I resolved to devote a few months out of every year to lecturing upon medical subjects, and my first effort took place in the city of Philadelphia, where I gave several consecutive courses of lectures to women only ; but after many earnest solicitations from the ladies in attendance to extend the lectures to the husbands and sons, I ventured upon one for a mixed audience. I very soon found, however, that one lecture would not suffice, so yielded to the

further demands, until the number increased indefinitely; and from that great centre they were extended to towns and cities throughout the United States, the territories, and British America, also through the Colonies of New Zealand, Australia, and Tasmania; and the whole of England, including six months in London; and the principal cities of Scotland and Ireland. Throughout all these countries and colonies there have been earnest entreaties from the large number of listeners, and from hundreds of grateful patients who sought relief at the hands of one of their own sex, for a book to read, from which could be gained a similar course of instruction to that to which they had listened in the public and private lectures, and to this general call I have yielded; and although in the midst of a heavy pressure of business I have resolved, for the first time, to put the subject-matter of my private lectures into print, with addition and numerous prescriptions and directions, which would be less practical if

given verbally ; and I hope that this little work may be the means of assisting some to a happier condition of mind, and to the possession of better health ; if so, the object intended will have been attained.

Hoping that all shortcomings may be generously overlooked, and that the reader will accept the substance in the spirit in which it is given, is the desire of the author, and to this end the book is written.

ANNA M. LONGSHORE-POTTS.

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DISCOURSES TO WOMEN.

PART I.

GYNECOLOGY.

CHAPTER I.

ANATOMICAL REVIEW.

THE great need of a wide dissemination of physiological and hygienic information among the women of every nation is apparent, when we are made aware of the fact that a great majority of their sex is suffering from some form of disease, and that, in many instances, the ailments might have been avoided had the sufferer been previously instructed as to the numerous causes provocative of disease.

The many general complaints to which both sexes are liable, need not be introduced into this small work, as they would occupy more time and space than we can at present grant. Our object now is to treat especially of diseases peculiar to the female sex, and before this can be entered upon satisfactorily, it will be proper to impress upon the mind of the reader the importance of a knowledge of the human system in health, and to endeavour to explain that

particular portion of the organization with which we shall deal most fully in this treatise, namely, the sexual system in woman.

The physical structure of both sexes should be understood by the individuals of either for their general welfare ; but that those of each sex should become familiar with his or her own body is imperative, if there is to be any hope of maintaining a normal condition.

If man knew more about the structure of woman, it would be to the advantage of women in general, for then fathers could advise and conduct the lives of their daughters to the age of maturity with much greater success than at present. Often through ignorance of the structure of the internal organs, upon which so much future happiness or misery depends, fond ambitious fathers unwisely encourage their daughters to compete with their sons and other gentlemen in the performance of athletic exercises, such as prolonged games at tennis or cricket; long walks of from ten to twenty miles per day; continued rowing, or severe rides on horseback—supposing them to be a source of health and strength, whereas an excess of such exercises often proves most harmful.

Brothers would be more thoughtful and con-

siderate for the welfare of their sisters if they knew that a certain course of exercise in which they participate would render them invalids; and we are sure that if husbands more fully comprehended the delicate structure of the female sex, their wives would be more cautiously guarded against the many causes of disease from which they now suffer.

The difference in the texture and formation of the organization of the two sexes indicates a difference in their pastimes and in their labors. This difference exists in every part of their construction, from the fibre of the bone to the configuration of the skeleton; and in this lies a secret which, when discovered, points to the natural position of man and of woman in the domestic and practical pursuits of life.

The fibre of the bones of an average man is of a texture to warrant the application of more force than that of the bones of a woman, though the framework is composed of similar elements, but so arranged and combined as to afford greater strength in one sex than in the other: on the same principle as that a fine or thin strand of silk does not possess the same power of resistance that a coarser or

thicker strand of silk of the same quality, when tested by the same amount of tension being applied to both; the thin strand will break more easily than the thick.

The size of the separate bones in the male sex is greater than in the female—with due regard to exceptions, for some women have larger bones than some men—but we are speaking of general facts which, however, are not disparaging to either sex. Strength is required of man, and nature has so prepared his organization as to meet this requirement, and a study of the peculiarities of his skeleton, confirms this opinion, for the entire framework is built upon the principles of ability and endurance.

Man is broadest at the shoulders, and his figure tapers from this part to the knees, and from the knees to the ankles. This formation is very suggestive of the strength of the sex; by it he is the better enabled to perform the heavier tasks in life, such as the carrying of loads, the bearing of weights, and the physical toil requisite for the improvement of the country, the building of houses and ships, the tilling of the soil, and the excavation of mountains for the transport of traffic, and particularly

for the security of a home, and for the support of a family.

On the other hand, the skeleton of a woman varies in its proportions according to what is required of her. She is shaped more like an egg; she commences from the hips to taper up to the shoulders, and from the same point downwards to the knees, then to the ankles, which formation has another aim,—not that she is to be an idler and a burden to man, but that she is to be the helpmeet for man, the mother of his children, as well as the caretaker of them. She is to protect his earnings, and to make his home pleasant; she is to be man's companion, his comfort and his blessing; for without her presence, life would become an irksome task, and the happiness he is so calculated to enjoy would be converted into a lonely, unwelcome existence, void of the sunshine of affection and domestic bliss.

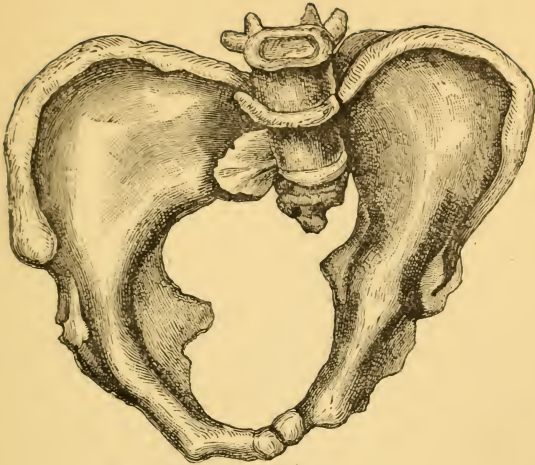
We shall only dwell upon that part of the framework of the body which interests us most in relation to our present subject; which part, from its resemblance to a basin, has been named the pelvis (Fig. 1). This occupies the central part of the skeleton, and supports the

spinal column, and is itself supported by the inferior extremities.

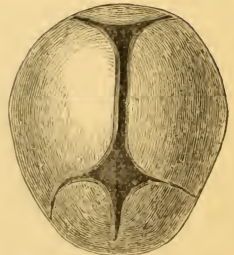
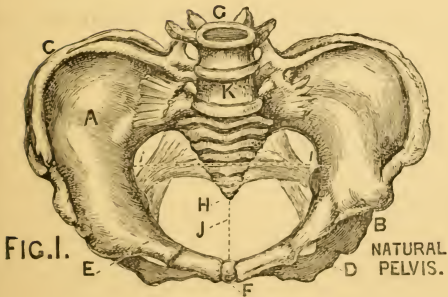
The pelvis is composed of four separate bones—two innominata, the sacrum, and the coccyx.

The innominata, A, are so named from their irregular, shapeless appearance, bearing no resemblance to any other known object, hence a term signifying nameless was given to them. These two bones form the sides and front of the pelvis, and in infancy each one is composed of three separate pieces, which meet and unite in the cavity of the hip joint, called the acetabulum, B, from its likeness to an ancient vinegar cup ; but in the adult these three pieces of bone are united. The expanded portion of the innominata, which spreads out like a wing, is named the ilium, C, and forms the hip bone, called the haunch, when applied to animals ; but when referring to the corresponding part of a human being, the use of the name ilium is more becoming, and in much better taste.

The lower part of the innominata is called the ischium, D, or seatbone, over which the glutii, or cushion muscles, the adipose tissue, or fat, and the integument, form a soft fleshy mass called the nates, which affords comfort in



DEFORMED PELVIS.



FŒTAL HEAD.

A, Innominata. *B*, Acetabulum. *C*, Ilium. *D*, Ischium. *E*, Pubic bones. *F*, Symphysis pubes. *G*, Sacrum. *H*, Os-coccyx. *I I*, The long diameter or inlet. *J*, Short diameter. *K*, Promontory.

sitting, and under ordinary circumstances of health is of quite sufficient thickness to do so ; but when, through disease or the want of proper nutrition, the form becomes emaciated, and artificial cushions are needed, then care should be exercised to secure for the purpose those materials which most resemble natural flesh in thickness and density. Wool, curled hair, or cotton wadding may be used beneficially, when prepared so as to be about two inches thick ; but feather or down cushions are inadmissible, they are too soft and too heating for health. Persons of sedentary habits, who sit much of their time, are more liable to contract cold, and suffer from weakness, which they might have escaped if the use of these precautions had been observed.

The custom of punishing children by slapping the nates with “ the slipper,” or with the palm of the hand, is to be deprecated, for it may prove disastrous to the nerves and nerve-centres located near these parts, and control the functions of the sexual organs. The sudden jar is liable to irritate and induce abnormal excitement, or it may produce quite the opposite effect, and paralyze the organs, so that the helpless subject will suffer in after years,

although there may be no injurious effect apparent at the time the punishment is administered.

The front wall of the pelvis is formed by the two pubic bones, E, which are united in the middle by a cartilaginous structure, compact and secure, which is called a symphysis, or seam, F. An erroneous idea has been entertained that these bones give way at childbirth to facilitate the passage of the fœtus; this error should be eradicated from the mind, for truth must take the place of error on all occasions when scientific facts can give convincing evidence. This and other "tea-party" stories have been handed down from generation to generation, without the tellers of them troubling to inquire into their truth or falseness; the ignorant have listened and assented to them, not knowing that their authenticity is but that of some "knowing" nurse, or ill-informed midwife, who, to relieve her patient's mind during the tedious process of delivery, has told the oft-repeated tale that the bones will yield and give the space required. But that separation does not take place, under any ordinary pressure, is certain; and if at any time it has taken place, it has been the result of excessive

force, such as may be caused by a blow, a fall, or some rash act ; but never from the pressure of the soft, yielding fœtal body. Such a circumstance as the parting of the bones would be as ineffectual to the end in view as it would be impossible of accomplishment.

The thick triangular bone to the back of the pelvis is the sacrum, *σ*. From the high appreciation of the ancients for the function of maternity, the name which implies sacred was given to this bone. The wealth of the early fathers was estimated by the number of their children ; so great was their appreciation of offspring, that sex worship was indulged in by many. The sacrum is composed of five separate pieces which, when fully matured, become united into one bone, which is very firmly wedged between the corresponding illii.

The *os coccyx*, *η* (from a resemblance to the beak of a cuckoo), is a small triangular bone composed of four pieces in youth, but becomes solid in the adult, and is attached to the small end of the sacrum by cartilage. This union remains flexible until near to the age of forty, when the cartilage becomes hardened by earthy deposit. The mobile condition of this bone facilitates the process of childbirth, and would

indicate that to defer maternity until the last possible few years would be unwise, as the resistance of the part must necessitate a more protracted and painful labour. The adhesion is so firm at times, that the union fractures by the pressure, which leaves after-suffering. When the parts must submit to such pressure through occasional births, the earthy deposit is somewhat extended or interrupted, and the mobility is prolonged. On the other hand, it is not wise to commence maternity before the body is fully developed with the hope of securing a more easy birth, through the general cartilaginous condition of the pelvic bones, for the size is yet below the normal standard of maturity, and the tissues quite too soft. So below eighteen years there are disadvantages as well as at forty; these extremes are hazardous, and should be avoided for the benefit of both mother and child.

The bones of the pelvis, in woman, are formed for the accommodation of the maternal function, therefore we find the inlets and outlets to be more capacious than in that of man; we also observe the height of man's pelvic bones to be greater and the cavity smaller than in woman.

The diameters of the superior and inferior straits of the pelvis, in woman, correspond with the necessities of the fœtal head, shoulders, and hips; as a rule, where the head can make its exit, the shoulders and hips are able to pass. The superior, or long diameter of the pelvis strait or inlet, 11, from side to side, is four and a half or five inches, and the measure corresponds with the long diameter of the fœtal head from forehead to occiput; while the inferior, or short diameter, 1, of the pelvis strait is four or four and a half inches, to correspond with the short diameter of the fœtal head; and these dimensions must be maintained, or there should be but a very slight deviation from them, to ensure the birth of a living child; for the fleshy parts must fill the passage to some extent, and leave but little margin in the dimensions of the straits, when a child of average weight is born.

Malformations or deformities sometimes appear. They may be on the part of the mother or the child, or of both; in either case the result will be unfavourable. If the deformity is great in the mother, the child must be sacrificed, and often the life of the mother jeopardized. The whole of the pelvis may be

unusually small, and if the various parts of it are abnormally developed it does not facilitate a normal birth at term; and either condition would be considered a deformity, and might result in much evil. But most frequently it is some special part which manifests an abnormal variety; for instance, the illii, or hip bones, may approach too closely; or the ischii, or seat bones, may be too approximate, thus narrowing the passage; or the pubic bones may arch too much, or, on the contrary, be changed into a concavity; or the most prominent bone of the sacrum, called the promontory of the sacrum, κ, may project so far into the cavity of the pelvis as to narrow the passage. Any of these peculiarities may arrest the natural delivery of the foetus, and necessitate foetal destruction and endanger the life of the mother.

If a woman is abnormal in her pelvic development she will be wise to avoid marriage, and seek happiness in some useful pursuit whereby she may do something for the good of humanity, and be content in doing it; remembering that marriage and maternity are not necessarily synonymous with happiness and success, as is indeed proved by the fact that there are many married women who, if they possibly could,

would gladly exchange places with the unmarried.

Pelvic deformities often have their origin in infancy, or in early girlhood, while the bones of the body are in a cartilaginous state, and are easily bent. Always laying the child upon one side, or always on the back, to sleep, as being most convenient for the nurse, may cause sufficient pressure to deform the bones. Also the lifting of heavy weights by a growing girl is unfavourable for her; she should not be allowed to lift heavy pails of water or boxes of coal, or constantly to carry children, or to contract a habit of standing on one foot while reciting lessons, or for any other purpose. The body may be easily deformed by any of these acts; for, as the young tree which is pressed by a rock, or by heavy timber, will continue to grow as it was forced to do at an early period of its growth, so will the human frame incline to follow the course early forced upon it; then in after life, when the possessor of this frame is of an age to marry, the deformity must militate against the natural result of marriage—that of bearing children.

All young girls should be guarded against such liabilities; and, let the inheritance of a

healthy body, well preserved, be the child's good fortune; whether she be one's own daughter, the less fortunate adopted child, or one taken through charity.

The tendency to deformity is still greater when the child is badly fed. Good, nutritious sustenance should be provided for the young; such as fruits and vegetables, oatmeal, wheat, and corn meal porridge, a plentiful supply of good brown bread, with milk to drink, and meat in moderation.

Mothers may carefully look after all of these necessary rules in their own growing daughters to insure the perfection of their matured forms, when they may be thoughtless about strange girls who make their homes with them, perhaps as workers in the nursery or in the kitchen, when it would be useless to say that for such there is a greater need of advice and watchfulness; for the chief inheritance a poor orphan girl may have is a natural well-organized body, and this should be guarded with scrupulous care to maintain health and strength, and normal shape.

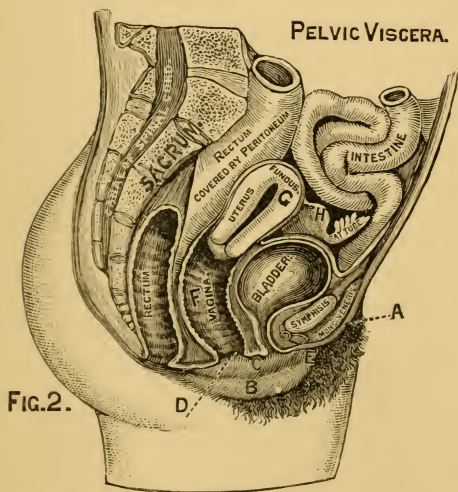
CHAPTER II.

THE GENITAL ORGANS.

WE must now direct the attention of the reader to the sexual system; that reproductive pivot upon which all humanity depends for the privilege of life; and to which woman may refer as the origin of her womanly traits, and of her feminine graces. When in a healthy and well-balanced condition, this important department of her organization is the source of her maternal joys and of her chief happiness; but, on the contrary, when diseased, or disturbed in its natural functions, it may be the cause of her greatest misery.

This system is composed of organs which may be divided into two classes—the genital and the generative organs. The genital are those organs which are located externally—namely, the mons veneris, the labia majora, the labia minora, the clitoris, and the hymen. All these organs are liable to various lesions; hence it is

proper that each one of them should be understood, as to its structure and functions, in order to enable the possessor of them to ward off the great misfortune of disease, which often makes deep inroads, even to the destruction of life, but which may be avoided by a timely knowledge of the causes which produce such great physical disturbances.



A, Mons veneris. *B*, Labia majora. *C*, Labia minora. *D*, Hymen. *E*, Clitoris. *F*, Vagina. *G*, Uterus.

The mons veneris (Fig. 2, *A*) is a fleshy mass situated upon the pubic arch; after puberty it is covered with a growth of soft, curling hair,

which seems intended as a screen to hide the organs from the sight of others, as a natural garment given at the time when the innate modesty of the sex would manifest itself. This modesty is not entirely the result of education, for the wild woman upon the distant isles will gather leaves to conceal her form; and the savage, untutored Indians, of both sexes, shield the sexual organs by means of the skins taken from their game, or by plaited grass; an evidence that nature has planted the germs of modesty in all, and she has partially clothed these parts, which are from the sacredness of their function those one would wish to shield. Then, too, as hair is a non-conductor, this growth may serve to fortify and strengthen the sexual system, by holding in reserve the magnetic forces, which might otherwise escape if the parts were exposed. This being a natural production, and doubtless given for a wise purpose, should not be interfered with, as has been the case in the experience of some young persons, who becoming alarmed at the growth, through fear or shame, have, with the scissors or razor, removed every vestige; but, by so doing, they facilitated the growth and increased their embarrassment, for, under such circumstances,

the length and abundance of this production would become a great inconvenience and annoyance to the subject. To avoid this, daughters should be early taught that under no consideration must this experiment be performed, as the result of removing the growth is the same as that of frequent visits to the barber by a youth who is ambitious of possessing a luxuriant beard, or an abundant crop of whiskers.

The labia are four in number, and they are so-called from their resemblance to lips; they are named *majora* and *minora* in accordance with their development; the larger, or *labia majora*, *b*, are on the surface, and they consist of two oblong, soft folds of flesh with skin upon the outer part, and with mucous membrane beneath, which is usually moistened by a small quantity of mucus from numerous glands to prevent friction from motion. These large labia quite, or almost entirely, cover the *labia minora*, or smaller labia, *c*, which are also called the *nymphia*, because they serve to guide the urine in its flow. The *nymphia* are usually mere folds of mucous membrane, and are scarcely noticeable in some subjects; while in others they are large, and protrude some distance

below the labia majora, thus causing much anxiety on the part of mothers or female guardians of the young woman who has this peculiar formation, and who, on being apprised of the supposed fact that she is deformed, shrinks from society, becomes timid, and fearful that her future happiness will be interfered with through this discovered irregularity; whereas, if the truth were only known, she might be comforted by being told that such physical variations are not deformities, any more than faces are deformed whose features do not maintain the same regularity, or even contour, as do those of others. Differences of development will take place in other parts of the body, as well as in the features of the face, and yet these parts may be natural and healthy. A lady who had charge of a motherless niece noticed, as the girl was stooping to dry her limbs after a bath, that there was an unusual development about the genital organs, and she consulted us with regard to the matter, for she thought her niece might be a hermaphrodite, or a combination of the sexes, and that she must vigorously guard her from the society of all young men, lest an attachment which might lead to marriage should arise between some one and her, and this she

believed would be disastrous to the happiness of both ; but an examination relieved her great anxiety, when she was told that the girl was perfectly natural, and as eligible for marriage as any of her young friends ; the difference simply consisting of an irregularity in the size of the nymphia. Many similar cases have occurred in our experience, and many anxious minds have been relieved by the facts being made known.

That subjects or their caretakers should be troubled or anxious is not surprising, for the occasional case of absolute deformity that presents itself impresses the mind of either with its importance. To say that the hermaphrodite or mixed sexual organization is never found, would be untrue. During our visit in England a young person attended the lectures to women, and heard the subject of sexual deformities discoursed upon, and being suspicious of some unusual variation in form and size of the organs of sex in the case of her own person, summoned courage to request an examination, which opportunity afforded the positive evidence of an admixture of the sexual systems. This case revealed almost an equal development of the male and female organs. A full description of this most interesting subject might here be

given, but as no special benefit could be thereby derived, either to prevent or to remedy a similar condition, we shall pass on to more practical subjects.

The mons veneris and labia are subject to various forms of irritation, which in some cases are principally characterized by itching, with no change in the appearance of the parts, neither redness nor swelling, but the itching is most distressing. This disease comes under the head of pruritis, and it may attack one of the female sex at any age, from twelve years to the close of life, but is most liable to occur at the approach of puberty, during the early months of pregnancy, and about the change of life; but at any period this annoying disease may appear as the sequence of organic inflammation, or from displacement of the womb, particularly if the blood is impoverished, or if the natural impurities are not eliminated. It may arise from cold, or from some local cause, or it may be the result of excoriating discharges. Much relief may be obtained from frequent bathing of the parts with one-third of new milk and two-thirds of tepid water; also from the use of acid lotions, an ounce of cider vinegar and a pint of water, or an alkaline wash may suit some cases better

—carbonate of soda, one drachm dissolved in half-pint of water. Any of these lotions may be repeated every two or three hours as the case requires. Prescriptions for external use are more palliative than curative here, as in all cases of disease the cause must be removed to ensure the permanent relief so much desired by every sufferer. In the more obstinate cases a physician had better be consulted. When internal remedies and medicated external applications must be prescribed, it should be done by one who has made the human system a subject of special study, and understands the physiological action of remedies upon the constitution; therefore all such attempts by the patient or interested friends to treat organic disease without due preparation, would be hazardous upon the part of the experimenter, and should not be attempted.

If the irritation should arise from a dry scaly eczema, it is the result of impurities in the system, and may be one form of scrofula, which may occur at any age, but is more liable to appear near or after the time of the change of life, and should be treated constitutionally and locally. Let the eruption be upon what part of the body it may, attention should be

directed to the emunctories, or cleansing organs, such as the liver, kidneys, and skin, with an effort to increase the action of them all, whereby the blood may be relieved from the excess of carbon and other impurities.

In all cases of eczema, whether located upon the genitals or elsewhere, the patient should observe rigid rules of hygiene. Abstain from the use of pork in any form, and from the excessive use of all meat; avoid strong tea or coffee, and use neither more than once a day; take a general sponge bath, in tepid water, twice a week; avoid all over-exertion and excitement; keep the bowels relaxed by some mild aperient.

Abscesses and other swellings may attack the labia. It is quite important to distinguish an abscess from a hernia, or rupture, as the treatment of one to advantage would be harmful for the other. A hernia is characterized in the labia by a swelling or an enlargement of the part, and sometimes pain is experienced; but the surface maintains its normal colour and temperature, is natural, and in the lying position the swelling recedes, leaving the part quite normal: while an abscess is recognized by swelling, heat, redness, and sharp lanci-

nating pains, and the enlargement is not diminished in the recumbent position. The swollen part may at first seem hard and resistant, but as the course progresses becomes pointed and soft in the most pendant part, and terminates by a discharge of pus.

The best treatment which can be advised for an abscess is to hasten the formation of pus, and facilitate its discharge, by warm fomentations, or, better still, by soft warm poultices of either ground flax seed (linseed), pulverised slippery-elm, or bread and milk; whichever is selected should have the surface covered with olive oil, or sweet cream, and applied soft and as warm as can be endured; when cool and solid, the poultice should be removed, and another, fresh and warm, applied. Poultices should be renewed every two or three hours until the abscess has been relieved of its contents, and their use should be continued until all the pus has escaped; then the opening should be dressed with simple cerate or some healing salve. An abscess might be lanced to advantage when at a proper stage, but the surgeon or physician should perform the operation if required. Diet, rest, and bathing should be attended to with care during the progress of

the inflammation, and the bowels should be relaxed.

The hymen, or maidenhead, D, compasses the lower third of the vaginal orifice A, and is intact until the marital relations have been established, or other force applied, sufficient to effect its rupture; hence the name hymen. The existence of this organ is considered by some to be a test of virginity; but facts prove that it has been removed by falls, by physicians' examinations, the use of the speculum, the introduction of foreign bodies in childish amusement, or of pessaries to support the womb. Again, a very slightly developed hymen might remain intact after sexual intercourse, so the existence or non-existence of this time-honoured test of virginity proves to be as unreliable as the exact location, density, or size of the organ. For in some this is as thin as tissue paper, and yields, like a thin scale of india-rubber, to the slightest touch; in others it is a thick, tough, fleshy membrane, and covers two-thirds, or the whole of the vaginal orifice, and demands the surgeon's scalpel to remove it, as the resistance such a structure would offer to the natural relations of the sexes could not thus be overcome; and if it is imperforate it

impedes the escape of the catamenial discharges. Therefore it is the duty of every mother, if qualified, to examine, or to have her infant daughter examined by a competent nurse or by a physician, to determine the condition of the child; and if the hymen be found imperforate, or a thin membrane extending over the proper orifice, it should be operated upon before the child develops out of babyhood, this being the most appropriate time, for the structure is now thin, the child has no suspicions of pain, is more manageable, and is preserved from the mental shock and embarrassment which must accompany the operation if performed near the age of maturity, when the organs are about to assume their normal functions. Many cases present themselves in our practice, where this precaution has not been taken, as evidences of the great necessity of more knowledge and thoughtfulness on the part of mothers and female care-takers of the young. In some instances, instead of an external crescent-shaped hymen, a circular membrane is found half an inch from the external orifice, attached on all sides of the vagina, and is met by the finger of the examining physician like a small orifice which yields to pressure to a certain extent, then

ruptures if force is sufficient. Such formations are not easily discovered by the inexperienced, and are often not suspected until marriage, or a physician's examination for supposed displacement affords evidence of their existence.

The clitoris, *E*, is a small, triangular, projecting organ, situated between the upper angles of the labia; it is erectile, but, unlike the glans penis of the male, to which it bears some resemblance in its extreme sensitiveness, is imperforate, hence it possesses no power of emission. This is the seat of local sexual excitement, and of special sexual pleasure, which, when aroused to its maximum, results in a peculiar characteristic thrill known as orgasm. These organs, male and female, have their legitimate functions, and in reason they were wisely given; what the gustatory nerves are to eating, these sensitive nerves are to reproduction. The former afford inducement to eat, through the pleasure which food yields to the taste, and lead to a sufficiency being taken, which might not otherwise be done when press of business or some slightly urging circumstance might arise to prevent it, until the system would suffer and eventually perish. The same would be the case with procreation;

the race might become extinct were the human family left with only a desire for offspring to direct their course ; but the pleasure induced through the proper love relations prompts to the act which results in peopling the earth ; all of which is preservative, is well ordered, and wise : but both appetite and passion should be ruled by wisdom, and neither should be allowed supremacy in their action over will and reason.

For the natural functions to prove a blessing, and a source of real happiness and health, the sexual system needs special care, or personal injury and misfortune to posterity must ensue. At an early age these organs may be discovered, even by an infant boy or girl, and by mismanagement are liable to yield their possessor more of unhappiness and distress than they ever do of pleasure. The part played by these organs, in the human frame, compares with that of the most delicate and intricate portion in a piece of machinery ; upon their integrity depends the welfare and happiness of the individual and of posterity. Those ever to be coveted blessings rely as much upon the health of these delicate organs, as does the life of the body upon the pulsating heart or the breathing lungs ; hence

the necessity for their being understood and protected, as is the machinery by the artist who uses it. Parents, guardians, nurses, governesses, and teachers should realize the great responsibility imposed upon them in guiding and directing the young, and their need of guarding those ignorant, inexperienced creatures until they reach a healthy and happy maturity, when, through the development of their own reasoning powers, and the knowledge they have gained from wise and proper instructors, by observation and experience they are prepared to tread life's fitful way without the guiding hands of friends.

By discovering the existence of these organs, through an accidental touch, or an irritating itching of the parts, a child may learn that friction upon the clitoris or penis induces peculiar sensations, and is led to repeat the experiment, and it will eventually become the victim of a passion which finds no assuaging influence but in the frequent repetition of the operation which first roused the latent nerves into premature activity. Children of both sexes may thus be ruined before the mother even suspects the cause of the unusual symptoms which present themselves in her child.

These habits of folly come under the name of masturbation, or self-abuse, a secret vice which should be guarded against, as we would guard our children from the scorpion's poisonous sting, or from the deadly embrace of some coiling reptile; the latter evils might result in immediate death, but the prolonged practice of the other will bring its unhappy victims to a state still more unwelcome to both parents and children.

This unnatural mania, which develops by repetition into a passionate furor, may also be acquired by the association of playmates who have been taught by older ones, and actually by care-takers, to whom they have been entrusted. Thoughtless nursemaids, to quiet or amuse the child, resort to the manipulation of the sexual organs, until the habit is fully acquired; and old men have so debased themselves as to become the tutors of this most alarming sin.

Boarding schools may become the very hot-beds of this terribly destructive vice; it spreads like an epidemic from room to room, and each pupil carries a secret with him or with her, until the whole school of fifty or two hundred become infected, as subjects of this deplorable depravity of which they should have been warned before

they ever left their homes, to encounter these conditions amongst strangers and class-mates from every quarter of the globe, and from under various influences, some of which have been a most unfavourable moral atmosphere for the training of childhood. We have had the confidence of many young people on this subject, we have heard their experiences and the lessons they had learned from their school-girl companions. No country or clime is exempt from this scourge. England, America, Germany, and France all need to investigate their public and private institutions, and try to awake a living interest in the minds of the teachers and proprietors, and to inspire them with the importance of educating the thousands who are placed under their fostering and protecting care, to shun all such temptations, and to declare against any improper overtures from their associates; and thus to make each one a moral light to guide his or her schoolmate to a higher scale of thought, and an influence to lead on to seek pleasure in that which will yield them true delight, instead of in that which will but weaken the body and ruin the mind.

The result of this sin is often an impaired digestion, the nervous system greatly weakened,

chorea, or St. Vitus' dance, epilepsy, languor, disinterestedness, the subject shrinking from society, losing self-confidence, and sometimes becoming imbecile, lost, utterly ruined for life, a blight upon any family or society.

In some constitutions the animal passions become so inflamed by the frequent irritation of the sexual organs, that the desire for gratification is increased, and the oftener this desire is yielded to the stronger becomes the passion, until nymphomania is established, a species of lunacy most distressing to encounter; and at last, from the great nervous strain, the faculties of the mind give way, and the subject becomes a depressed, misanthropic, self-accused culprit, who shuns all society, loses all interest in the general pursuits of life, and labours under a constant sense of disgust and melancholy.

To prevent a natural tendency to the passionate impulses which assert themselves at the age of puberty, or about the turning-point between childhood and coming maturity, much care should be exercised in diet; excess of meat, strong coffee, tea, and other stimulants should be avoided. Children should lie on hair or straw mattresses instead of on feathers, and should wear no night clothes that are liable to

press upon the excitable organs. They should rise immediately upon waking, take a tepid bath three times a week, have cheerful society about them, engage in active exercises, never read love stories or exciting romances; and conscientiously do the right for the sake of right; let them have work, and physical exercise for the body as well as some responsibility to claim the mind; for luxury and idleness are fruitful promoters of this much-to-be-deplored evil of the junior members of society. Parents need not anticipate that the habit may be suggested by their words of warning; far from it—every child will respect the wise advice proffered from that source, and honour and love the parent for the timely aid given it when crossing the marshy road through puberty to well-established man or womanhood.

When the case excites parental notice only by the ravages already made upon health or reason, it may be too late to save the wreck; and disregard, even hatred, have been expressed towards those who ought now to have esteem and filial love. So, parents, to your tasks! in mercy save your children and your youth by wise and timely admonitions, and by your kind and loving counsel; win their confidence, and

you will reap the sweet reward of your children's honest, heartfelt gratitude, which now is often given to strangers who, through philanthropic sympathy, have laid these ills and their consequences before the inexperienced minds, and extended to them a friendly hand to save them from sinking into infamy or premature death.

CHAPTER III.

THE GENERATIVE ORGANS.

THE internal or generative organs, which consist of the vagina, the uterus, the fallopian tubes, and the ovaries, are of the most vital importance, and to them we shall now confine our remarks, for upon their condition depend much of woman's health and happiness. If they are in a healthy state, she is not aware of their existence, except as their natural functions are carried on; no aches, no pains, no physical inconvenience or uneasiness should accrue from them when in their normal state, and free from pregnancy; even then but little disturbance should be experienced compared with what has now, too often, to be endured.

The timidity so universally experienced by the female patient, prevents her making a true statement of her case to her male physician; the difference of sex must be an almost insurmountable barrier between her diseases and his

correct diagnosis of them, and she is unable to describe her symptoms, or to locate her feelings, from the want of the knowledge how to speak in correct scientific terms, and the common expressions to which many resort, are often too repulsive to a delicate nature, and would leave a false impression upon the mind of a physician if they were spoken. Much of woman's greatest suffering has its origin in and about the pelvis; and this term, if understood and made use of, might communicate much useful information whereby the medical adviser would glean sufficient knowledge to form a correct diagnosis, and to prescribe with wisdom; but if a patient uninformed on technicalities replies to the question, "Where do you suffer?" She answers, "In the stomach," when in reality the suffering may be far below that organ; or, if she timidly replies, "low down," the expression is too ambiguous and indefinite upon which to form a diagnosis, for relatively speaking, there are so many parts which might be suspected from such a statement, as one being lower than another—the hip, knee, back, or abdomen might be the locality referred to; whereas, if the organs of the body were better understood by the patient, or if even the regions could be correctly

described, the case might be more clearly comprehended and successfully treated. That a large majority of the female sex suffer to a greater or less degree from some derangement of the generative system, is a fact much to be deplored, not only as regards the immediate and personal misery of the subjects concerned, but in consideration of the generations yet to come, for children born under such unfavorable circumstances cannot be blest with their rightful inheritance of strong robust constitutions, and they must endure much suffering and deprivation on this account; even if they do not inherit the exact weakness or disease of the mother, there will be deficiencies in bodily strength, or in mental power on their account, and either or both may serve as a barrier to the much hoped for ability and success the parents so fondly expected to develop in what otherwise might have been most promising offspring.

In the animal kingdom, below the human family, much care is observed towards the application of the laws of reproduction, and to secure fine healthy creatures there must be healthy parents.

That the uterus and its appendages are the

most frequent source of woman's suffering is apparent to an interested observer, and from these organs comes a greater variety of symptoms than from any other that she possesses.

Consumption of the lungs or a corroding cancer may cause much suffering, and prove fatal in the course of a few years or even months, and then her misery ends; organic disease of the heart may cause her sudden death, but uterine disease wears gradually upon the general system in such an obscure and hidden manner, that the real malady is often not understood, and one by one the vital forces yield, until the unfortunate victim finds life an irksome task, and all her wonted pleasures of the past become painful and unwelcome. She loses courage as her strength gives way, her mind often becomes greatly affected, she experiences loss of memory, melancholy forebodings, if not frequent impulses to commit some desperate deed which in her calm and quiet moments would never be suggested. Under such conditions life becomes a burden, and death would be preferred. Now, every organ in the body enters into sympathy and becomes more or less implicated organically; then for years the struggle lasts, until one by one the tender cords of life give

way, and she may die—or worse, live to suffer in both body and mind; and if she does not become a raving maniac, she will probably become disqualified for companionship, and unfitted for society, and will linger on as the nervous, fretful, unhappy, feeble subject of what may never be understood by her dearest friends; and even her physicians may have failed to comprehend her malady. So after years of this useless suffering, this anguish of her mind, the fatal hour comes and she fades out like a blighted rose, and dies of what no one knows; the complaint was wisely pronounced “General Debility,” for which no remedy could be successfully prescribed; whereas she really died from what had never been suspected, because the facts were not understood—a disease of the generative system. The vagina (Fig. 2, F) is a sheath-like passage, from four and a-half to five inches in length when in the erect position, and from five to six inches in the recumbent position. The structure of this organ is peculiarly adapted to the purpose for which it is intended, and it is composed of erectile and muscular tissue; it can be contracted or narrowed at will to a considerable extent. The entire passage is lined with a soft, yielding

mucous membrane, arranged in folds, both perpendicularly and horizontally, affording a great degree of distensibility under needful circumstances. In the normal state, the sides approximate each other, while during labour they yield sufficiently to permit the exit of a fœtus weighing from ten to fourteen pounds; after which, in due time, the vagina contracts to almost its original size. The mucous membrane which lines the vagina is studded over with small mucous glands, which secrete a thin, clear, viscid, bland liquid, called mucus, which lubricates the vaginal walls, and keeps them soft and flexible; and nothing more is experienced in health. While any excess of moisture that becomes noticeable, or wets the garments, comes under the head of leucorrhœa, which includes the various discharges coming from the vagina, and which are known as whites, or fluor-albus, in contradistinction to the sanguineous catamenial flow. These discharges vary according to the conditions and circumstances under which they originate. In some instances they are clear, thin, and transparent, excoriating and irritating the healthy surface wherever they are permitted to remain for any length of time; this is the result of acute

vaginitis (or inflammation of the vagina), and is the effect either of cold, some local irritation, or over exertion. Under other circumstances the escaping substance will be of a thin, white, milky appearance ; or thicker, more like cream ; or at times it will resemble curds and whey ; or it may be thick and glairy, like the albumen of an egg ; or streaked with blood, and tinged with yellow.

These different discharges indicate the stage of inflammation and the condition of the parts.

The thick, white, glairy substance escapes from the neck of the womb, and indicates a congested condition of the small glands there located. The yellow and slightly red discharges are evidences of inflammation, if not of ulceration of some surface, either the vagina or the uterus, and should receive immediate attention.

All women, whether married or single, are liable to leucorrhœa ; children are sometimes attacked by it, and infants, during the period of teething, through sympathy.

Vaginitis may be contracted by excessive exercise, or by a sudden suppression of perspiration, and may assume a catarrh.

In girls near puberty, leucorrhœa may pre-

cede the menses for a few months, and cease spontaneously when they become established.

Any local irritation will produce this discharge, such as the introduction of foreign bodies, the use of improper pessaries for the support of the womb; and in many cases, the displacement of the womb proves an effectual cause, for this organ, when pending low in the vagina, or when pressing unduly upon any part of the canal, will induce a certain amount of friction which will excite an abnormal flow of either healthy or vitiated mucus, and from this much disturbance will come.

In the married state there is a greater liability to this disease, from the frequent births, and instrumental labour, increased anxieties, and often more exercise; while excess of the marital privileges is a most prolific cause; all of which must be duly considered in the treatment of this as in that of all other diseases of these organs. The cause must be removed to ensure a cure, let the treatment be as wisely prescribed as is possible.

Vaginal injections of a mild and cleansing character are always admissible; but much caution should be exercised so as not to employ for this purpose powerful astringents, such

as strong solutions of alum, tannin, or white oak bark; or of hot water, as has been too freely prescribed and too readily adopted by the credulous sufferer.

If the uterus is displaced, attention in this direction is absolutely necessary; and immediate reduction to its normal position will prove almost, or quite, a cure in itself.

All foreign bodies which can possibly irritate must be eschewed, and in the milder forms of the disease very mild treatment will suffice, such as tepid sitz baths of fifteen minutes' duration, and injections of flax-seed (linseed) mucilage, weak, tepid, black table tea, or milk and water, will suffice; but if the case has been long-standing, or if the attacks are repeated, a more earnest course should be adopted—with due regard to diet, rest, and general health, keeping the system regular in all respects—and the case will kindly yield.

The following prescription is often very effectual:—

Ten drops of tincture of cantharides three times a day, diluted in half a wine-glass of water, to be continued for ten days, or until a slight uneasiness in urinating is experienced, then cease; and take, half an hour after meals,

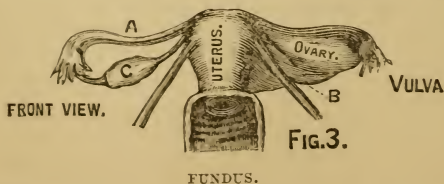
three times a day, ten drops of muriated tincture of iron, in half a wine-glass of water. Alternate the remedies, using the iron seven days, then resort to the cantharides as before. This may be repeated for six weeks if needed; but after that time discontinue the use of the cantharides if not the iron. If the uterus is displaced, a uterine supporter should be adjusted, as will be explained in a future chapter upon uterine displacements.

The uterus, or womb (Fig. 2) is known by many names; it is called by some the matrix or bed, the nest, and the mother. This last name arose from reasons quite apparent, although we never heard it given until, at the close of a lecture to ladies, a woman asked if her mother was diseased. The answer was that it was impossible to tell, for we had never met her mother. Then she placed her hand over the lower part of her abdomen and said, "I feel badly here." This action indicated that it was the state of her own health to which she alluded; but it is sometimes difficult to guess at a woman's meaning when she speaks of her mother, and to know whether she refers to a part of her own body or to her near kin. Many German women use the term mother in

speaking of the uterus. A quaint authoress once wrote that “the uterus is the nest of the world, and the curse of woman;” which remark would prompt one to believe that she had been a victim to uterine disease, and had formed her conclusions from her own sad experiences.

Truly the womb does serve as a nest or receptacle for the ova or egg, and from thence all humanity must issue; but rather than a misfortune, this organ should be esteemed by woman as one of the greatest blessings that could be conferred upon her, affording, as it does, the grand and unparalleled function of reproduction.

The uterus is an organ composed of muscular fibres distributed in different directions, and to the touch it resembles the gizzard of a fowl. The average size of a healthy, unimpregnated uterus is two and a half inches long, one and a half wide, and three quarters of an inch thick; and it is hollow. The upper or most elevated



A, Fallopian tubes. B, Broad ligaments. C, Ovary.

part is called the fundus (Fig. 3); the most expanded part, below the fundus, is the body; the more constricted part is the cervix, or neck; while the extreme point, opposite the fundus, and the most pending, is the os uteri, or mouth of the womb, and it consists of a small orifice usually flattened from the fore part to the back, of a capacity to admit but a small goose quill, and often still more contracted. The neck is penetrated by a narrow canal of an inch and a half in length, which terminates with an internal mouth usually more narrow than the first described. The cavity of the body of the womb is triangular, and of a capacity to hold but from fifteen to thirty drops of fluid. The entire organ is shaped like a pear, and is slightly flattened from the front to the back; the stem end of the pear represents the mouth of the womb.

At the angles of the fundus, on either side, are found internally small orifices, which are the commencement of the fallopian tubes (Fig. 3, A), so named in honor of their discoverer. They are narrow canals, from three and a half to four inches long, terminating at their distant extremities in a fringe-like appendage, like a diminutive hand, in the centre or

palm of which is the outer opening of the tube, which is much larger than the internal orifice, which admits of nothing larger than a bristle. The office of the fallopian tubes is to grasp and convey the ovum from the ovaries to the inside of the uterus, where it remains if impregnated, but if not, it passes away soon after its deposit. The ovaries will be described in the following chapter.

Now that the uterus and its surroundings are supposed to be quite well understood, we shall endeavour to explain the principal supports of the uterus, for this will be of value in consideration of the various displacements to which the organ is so freely subject.

The peritoneum forms a partition between the womb and the abdomen, and this soft, elastic membrane is reflected over the bladder and upon the rectum, connecting these three organs very intimately, and at the same time it serves to support the womb on either side, which parts are called the broad ligaments (Fig. 3, B), and are the most important ligaments connected with that organ. There are, however, two small round ligaments attached to the upper anterior part of the organ which come over to the pubic arch, there to

be lost in the fleshy part of that region; these ligaments are not supposed to assist very greatly in the office of support; but the united aid of all the ligaments, and their connection with the bladder in front and with the rectum at the back by means of the peritoneum, and by their union with the upper part of the vagina, is all that sustains the uterus, and prevents it from following the natural law of gravitation and sinking to the orifice of the vagina.

These soft, yielding structures permit the ascent of the uterus during gestation when, by the developing fœtus, this organ is raised far above the umbilicus even to the region of the stomach; then, after the birth of the child, the ligaments contract to their former length, and serve their usual purpose of support. By the great susceptibility of these ligaments and supports to changes in shape and length, so as to meet the natural exigencies of the case, one can readily understand that the womb is liable to be displaced according to the force of the circumstances which control it.

CHAPTER IV.

MENSTRUATION.

THE ovaries, or germ-bearing organs (Fig. 3, E), are two small bodies about the size of the meat of an almond, situated in the broad ligaments of the uterus, and about an inch and a half from that organ.

These organs lie below the fallopian tubes, and are separated from the vagina by the walls of that organ; therefore, under ordinary circumstances, they are not perceptible to the touch by a vaginal digital examination, and are positively not to be seen by the means of any speculum examination of that cavity.

During early girlhood these organs remain in a quiescent state, until the physical system has become developed, and has attained sufficient durability to warrant the extra effort which the mind and body must put forth to maintain the physical strength, and at the same time develop the germ of a new being. This period is denomi-

nated puberty, when great changes take place in the mind and body. The childish interest in trifling amusements ceases ; the love for the doll changes into a taste for more womanly occupations ; the playhouse is gradually abandoned for the care of the apartments ; and instead of working up ribbons and silks into tawdry dress for her numerous dolls, the girl now deftly manipulates her laces and embroidery to beautify her own apparel, with the thought of making herself more attractive ; she becomes timid and reserved, and blushes in the society of those of the opposite sex, in consequence of her real natural attraction to them, though she shrinks from the knowledge of it. A new world seems to present itself, and she scarcely knows how to meet it.

At this time her physical system changes in appearance. The mammary glands begin to develop, and sometimes to pain and ache. The pelvis begins to widen, and the hair makes its appearance in the axilla and on the pubes. The voice becomes soft and musical ; and the little romping, rollicking girl is magically transformed into them odest, thoughtful, young woman.

At about the age of fourteen or fifteen the

evidence of her germinal period presents itself in the form of a sanguineous discharge, the result of ovarian action.

Here, in the human female, we find the same vital attraction maintained as in the lower animals, and even in the vegetable kingdom. Whichever part of the organization becomes aroused into greater activity there will be found an excess of the supporting fluids—as, while the ear of corn is developing, the growth of the stalk and leaf will be retarded, because the vital fluids are taken from them to supply the extra amount necessary for bringing the ear to maturity ; and the generous development of blossoms on a fruit tree indicates that the vital fluids of the plant are directed to the development of fruit, and the tree is stopped in its growth. The wise horticulturist will limit the necessities of the fruit by diminishing the buds, and so diverting the fluids to the extremities, that the tree may continue to grow and maintain its vitality.

When the brain in the human being is very active, the blood is diverted to that organ for its maintenance ; and, at the time of eating, the blood is attracted to the stomach, and yields the necessary gastric secretions ; or if the

muscles are very active the limbs are warm with excess of blood in the parts ; so when, through a natural or forced combination of circumstances, the ovaries assume a greater activity, there is a more generous supply of blood to them for the development of the ovum.

After the germ is matured there is no further use for the excess of blood, for it has undergone peculiar physiological changes, and the blood now escapes from the small vessels of the lining membrane of the uterus, passes over the folds of the vagina, and is expelled as the menstrual flow.

This blood differs essentially from both arterial and venous blood ; in color it presents the appearance of a mixture of the two, and has a peculiar, characteristic odor.

The flow naturally continues from four to seven days, and it is estimated to be from three to six ounces, or from a gill to a gill and a half.

This discharge is properly called the catamenia, or menstruation, from the fact of its regular occurrence every twenty-eight days, or every month ; but it is also known as "the terms," "turns," "courses," "being unwell," and "the flower." This last of the familiar

names is best, as being most significant, for implies a function justly comparable with that of plants, which seldom yield fruit before they bloom ; and woman usually has her menses, or the flower, before she bears offspring. Although there are exceptions, as facts will demonstrate, such as the case of a lady in California, U.S.A., who never menstruated until she had given birth to five children ; after which the function occurred regularly, according to the usual custom.

The ovarian exacerbation is doubtless attempted several months before the sanguineous flow makes its appearance, judging from the periodical symptoms in the young girl, such as slight pains in the rudimentary mammary glands, backache, a flushed face alternating with paleness, headache, and pains in her thighs, which in a few days pass off to return in about twenty-eight days, accompanied by a slight leucorrhœal discharge, until at length the climax of menstruation is established, which is usually about the age of fourteen or fifteen years ; but there is no regularity as to age, for climate, constitution, and habits control the development of this function. In the warm, relaxing localities near the tropics, the

time of puberty comes earlier, and to menstruate at eleven or twelve is not unusual.

During a series of lectures given in a town in Indiana, U.S.A., we were called to see a child of four and a half years, who had experienced a regular monthly discharge since she was eight months old, with the exception of only two months missed in that time; and this was accompanied by the usual development of breasts, and other appearances of maturity; the child was healthy, and large for her age. Such anomalies are not easily to be accounted for. In cold regions this function occurs at the age of from sixteen to twenty years.

Girls, like hot-house plants, are capable of being forced into maturity.

The stimulating effects of fashionable dress, including the use of tightly-drawn corsets, the free use of flesh food and wines, the associating with senior companions, and womanly pursuits, will prematurely develop ovarian action. But all these causes should be conscientiously refrained from, in order that a girl may be kept as a girl, until she is rounded out into physical symmetry through the natural process of growth; then she will retain the bloom and buoyancy of youth for many years, and be a more healthy,

happy woman in after life than she could be if the forces of her being were falsely directed by her unwise guardians, or by vain, ambitious friends.

Mothers have need to watch the growth of their daughters, and to exclude them from coarse and improper society, and they should have cheerful, playful companions; freedom of the muscles through generous, but guarded, exercise; good, plain, nutritious food, with water or milk as a beverage; soft, warm, loosely fitting garments, equally distributed over the limbs and body; and much sleep; also they should not allow them to indulge in light, exciting romances, or amorous stories. With such precautions the girls will develop naturally to a condition of strength and endurance before this experience breaks upon them. The symptoms of menstruation are not marked in the healthy woman. A sense of lassitude, an indisposition to enter into laborious tasks, a feeling of weakness in the limbs and back (which are in some scarcely noticeable), and mentally a greater degree of sensitiveness, and an inclination to weep under slight provocation, are all the feelings which should be experienced; and after the flow is thoroughly established, the spirits react and

become exalted, and the mind resumes its buoyancy.

During the process of menstruation, the mammary glands duly sympathize, are frequently tender and more or less swollen; but this condition, under ordinary circumstances, requires no treatment. However, if the case proves a really painful one, the breasts may be bathed with a mild liniment of gum camphor 2 drachms, olive oil 4 ounces; *dissolve the camphor in the oil*. Use this morning and night, and apply a warm flannel during the time. Thus the normal function is repeated monthly with only a necessity for care to avoid cold, over-exertion, and mental excitement.

CHAPTER V.

AMENORRHŒA AND SUPPRESSED MENSES.

THERE are certain circumstances and conditions which prevent the appearance of natural menstruation, and these come under the head of Amenorrhœa, or, where the menses are wanting. The causes are both mechanical and constitutional; and the non-appearance of what has been considered a normal function since the race began demands attention: and after the usual age for its appearance, if there are no apparent constitutional causes to prevent it, an examination of the subject should not be deferred.

There may be an imperfection in her organization—no uterus, or no ovaries—in which case nothing can be done, and the general health may not be materially interfered with, for woman can live without either. The deficiency of uterus would not change her womanly nature; it is the development of the ovaries which yields the womanly traits, and moulds the

feminality ; so if these exist in a healthy state, there will be no radical difference between her and others of her sex, only there is no uterus to render her capable of maternity. If there should be a uterus and no ovaries, there would be no exciting cause for menstruation. Again, uterus and ovaries may exist, but one or both may retain their juvenile quiescent condition through life ; there may be no menstruation, no ill health, but no possibility of maternity while they continue deficient in their functions. Such abnormal deficiencies may spontaneously change in the course of twenty-five or thirty years, and the functions be established partially, if not to a normal degree.

There may be an occlusion, or closure of the mouth or neck of the uterus, or an imperforate hymen may exist ; either condition should be changed by the means of an operation.

If the mouth of the uterus or of the vagina were closed, the ovarian action need not be retarded, nor the sanguineous substance be suppressed in its accumulation ; but, on the contrary, from month to month this might accumulate in the uterus or in the vaginal sac, and be there retained, except as by the process of absorption a portion of it might be returned

into the circulation ; but after a repetition of these periods, the condition might be reasonably suspected from a swollen abdomen, a feeling of tightness, and eventually a protrusion of the floor of the vagina, and a soft pulpy tumor might be detected, which should be unloaded of its contents through the operation of 'lancing the imperforate hymen at once, when a mass of dark, stagnant blood would escape, and afford immediate relief; and if the imperforate hymen proved to be the only obstacle to the evacuation, all trouble would cease, and the subject need no further treatment if the general health were not impaired.

If the discharge does not make its appearance in consequence of impoverished blood, or want of nerve force, or from a torpid state of the liver, or poor assimilation of food, all the different organs related to these functions should at once receive attention, or the health may become irreparably injured.

A coated, yellow tongue, sallow skin, constipated bowels, sleepy, dull, listless habits, no appetite, and headache would be the symptoms.

When the menses have been present, and fail to return, the condition is known as suppressed menstruation ; and this may be attri-

buted to either voluntary or involuntary causes. Voluntary, when means have been resorted to with a desire to stop their flow, as has been done when the menses would have been an obstacle to some enjoyment, some proposed visit, party, wedding, or other engagement; then attempts have been made to suspend what seemed a great inconvenience, and young women have followed the example or advice of older, but unwise associates, and have drank a gill of vinegar or alum water, have eaten a lemon, cinnamon, nutmegs, or cloves; or have placed their feet in cold water for twenty minutes or half an hour—any of which improprieties may jeopardize life, or at least ruin the health and make life miserable. The involuntary suppression is equally disastrous, though not equally culpable, for many girls and young women have been uninformed of this prospective climax, and at its appearance, through fear or shame, have endeavoured to remove the stains from their linen by washing it in cold water and afterwards wearing it to dry upon their persons; some have walked through streams of water, or sat in cold water with a hope to stanch the flow which was supposed to be from a ruptured blood-vessel,

and having heard that cold water applications were beneficially used for nose bleeding, or for flesh cuts, they have unwittingly tried them with the same view in end.

Other young people, equally ignorant, without imagining the result, have brought on fatal illness through sitting upon damp grass, or spending the day in a school-room in damp garments.

Many young girls are sent away to boarding school without a preparatory knowledge of the advent of the menses, and in the midst of strangers they often commit great physiological errors to shield their condition; and from exposure to cold, or from other indiscretions, may be contracting illness which will result in death.

A girl should be early informed of all these important matters, to prepare her to protect herself from cold, and from the natural results of neglect and exposure. At the age of twelve, the mother, elder sister, guardian, teacher, or friend should acquaint her of her coming maturity, should explain why this change should come, and inform her in such a calm and natural manner as to win the young girl's confidence, and to impress upon her the great

necessity for care, and the consequences of neglecting the rules of health. Her attention might be directed to some feeble women and grown-up girls among her acquaintance, as examples of the violation of some of these laws; and she might be warned that her fate may be the same. Such advice would be invaluable, but should be accompanied with words to caution her against referring to the subject at improper times and under improper circumstances.

The mother, or one who takes her place, may converse upon such subjects with great confidence that they will be well accepted, and that they may save the young from protracted disease, or it may be premature death.

If the menses cease abruptly, or by degrees, attention should at once be given to means towards their speedy restoration; they may sometimes be re-established by the use of warm foot baths, or by sitting over quite warm water for twenty minutes at a time, while on both occasions great care must be observed to protect the body from drafts of air, or from cold chills; the patient should be always wrapped in a blanket or large shawl.

Frequent draughts of hot pennyroyal tea, or

tea of motherwort, or copious draughts of hot milk, will be nourishing and efficacious. But if after a trial of these mild forms of treatment the menses do not appear, more radical treatment must be prescribed. If the menses are not re-established, some unfavourable symptoms may soon arise, such as hæmorrhage of the lungs, stomach, bowels, or bladder; or diarrhœa, excessive flow of the urine at the time when the menses should arrive; severe headache, abscesses, eruptions; or a cough serving as a vicarious menstruation, a substitute which at first may be only functional, and will soon disappear with the appearance of the looked-for menses. While in other cases these symptoms may increase, or be accompanied by actual organic disease, to which a young life may be sacrificed; hence the need of watchful care, and of effectual but harmless remedies at hand; but the use should be avoided of all drugs of a powerful, forcing nature to purge and prostrate, with the hope of bringing away a discharge when there is none to come. The system must be so treated as to establish harmony between the different parts, then nature will respond and the menstrual discharge will appear.

CHAPTER VI.

DYSMENORRHŒA, OR PAINFUL MENSTRUATION.

DYSMENORRHŒA need scarcely be considered as a disease, but rather as a condition or symptom of a derangement sufficient to this end.

Both married and single women often suffer pain at the time of menstruation ; some experience it from the beginning of their menstrual life, and others not until some time later, or even until near the cessation of the function.

The pain may be slight and merely enough to annoy by its constant diversion of the mind, or it may be much more aggravated, and some will suffer almost or quite as much as women in labor ; there are cases where cramp pains are most exhausting, or where convulsions ensue from the persistent agony. Also in the duration of the pain there are great differences, as well as in the periods of its occurrence ; in the milder forms it may last but two or three

hours, without any interruption to business or pleasure ; in the more serious cases pain may last for six or twelve hours, or for two days, while in some subjects the whole period is characterized by pain. Again, one will suffer before the appearance of the discharge, and cease to do so at the beginning of the flow ; others, less fortunate, will commence the period quite painless, then as the age advances so does the pain increase, and the discharge and pain cease together. Then another will suffer at the close, or after the flow has ceased entirely.

But it would be impossible to give the exact conditions of all the different phases in the limited space which can be devoted to the subject in this little work, or to tell why one person is affected thus, and why another differs. It is enough to know that all constitutions are not the same, and that symptoms of the same disease will vary in the different persons affected.

The causes of dysmenorrhœa should be understood in order to direct the susceptible individuals how to avoid this great affliction, for every female is liable to suffer during the natural function, from her earliest experience

to the change of life, or to have attacks if circumstances greatly favour them; and it is a sad condition for one to have to endure, from month to month for from twenty-five to thirty years, the racking pains which some experience.

Let the constitution be however strong, such suffering at these stated times must weaken the nerves, and eventually affect the brain, and every part must prematurely yield to this great wrong, which in early life might have been avoided by judicious cautions given by the well-informed mother, or by the governess or teacher, as a necessary part of the young woman's education, and a part which would be of infinitely more importance to her in her future life than many of the lessons she is compelled to learn, which are often never applied to any after use, and only serve to tax her mind and exhaust her strength; whereas if the time given to them had been devoted to the investigation of her constitution and the functions of the organs which go to make up her complex form, particularly this department, upon which depend not only her own comfort and happiness but the weal or woe of posterity,—with such a training she might have been enabled to avoid

the many shoals lying in her outward course ready to wreck her little bark, as they surely will if she is not wisely guided, or unless by a mere chance she does not strike upon them.

To mothers we would appeal to save these young creatures from all these woes, by all the good advice which they can give, and to encourage more opportunities whereby their girls shall receive what to their elders may have been denied—a physiological education.

Pain, under any and all circumstances, may be considered as indicative of some existing wrong, as it is not a natural sensation induced by any of the normal functions, and is a symptom or sign serving to direct us to the evil conditions by which it is induced; so it would be wise for all to know what the conditions are, that they may be shunned. It is reasonable to believe that such information would be made of practical use, and that as much care would be observed to avoid the many ways by which various diseases are contracted, as a rational being would observe to avoid fire, poisonous gases, rabid dogs, serpents, or musket balls.

One of the causes of painful menstruation is congestion of the blood-vessels of the ovaries,

or of the uterus, or of both—and it is often the result of exposure; when the surface vessels are chilled by cold damp atmosphere; or by the feet remaining damp after a walk in wet weather; or by the limbs being insufficiently clad, either through neglect or the dictates of fashion; from sea-bathing at improper seasons, or prolonged beyond a reasonable period; sitting on damp cold benches in the public gardens or at home; and thoughtless removal of some thick under-garment for one less substantial;—these are some of the many ways by which our sex are made to suffer; one such occasion may serve to cause years of pain at these periods, and all girls, and women too, should guard against such unphysiological acts, and also at the time of the menses avoid all kinds of excessive fatigue from violent exercise, such as riding on horseback, skating, either on the ice or indoors, lawn-tennis, cricket, long walks, or any fatiguing labor, such as gardening, house-cleaning or washing, by which the body becomes heated and then suddenly chilled; many lose their health from such causes, and suffer what might have been unknown under a more reasonable and considerate course of life.

Then again, a torpid sluggish liver, defective digestion, or enervated nerves, are sufficient cause for menstrual pains; and a displacement of the uterus is another fruitful source of this monthly torture, and perhaps more provocative of pain than any other. But this subject will be more fully considered in its legitimate place.

All sufferers from these pains wish for relief, but frequently the treatment resorted to merely alleviates for a time instead of curing, for the cause is too often neglected; and such cases being usually under the charge of a physician of the male sex, the difficulty of diagnosis is too great to overcome; and to suggest a remedy to ease the sufferer is the most convenient course, and both doctor and patient seem quite well satisfied; or if not, a repetition of the treatment is prescribed, until at length the patient sees no need for calling in the doctor, but is induced to believe that there is no real help for her. So she begins to drug herself with perhaps opium or morphia, and from month to month she repeats the doses until they become an absolute necessity, and a habit is often formed which becomes as fixed as a natural requirement of food, and she becomes the con-

firmed subject of some narcotic, or hydrate of chloral, whiskey or gin, until the habit of drugging is as persistent as the condition which first prompted the taking of narcotics or the intoxicating draught, and ruin will soon follow this pernicious course ; for the drug-taking will be continued on account of the liking acquired for it, after the pain which demanded it has ceased.

The only successful way to treat these cases, is to ascertain the cause of pain in each particular subject, and then to prescribe accordingly ; but to give ease in a harmless way is all that can be done when the cause is not known, or can only be judged by the symptoms, in cases which have not been examined, or even seen by a competent physician. So upon general principles it is desirable to give, instead of narcotics or spirits, a gill or half a pint of hot water tinctured with a few grains of capsicum (cayenne pepper), either sweetened or otherwise, to suit the taste. Hot foot-baths may be resorted to, or sitting over quite warm water for ten minutes. Hot applications over the seat of pain, to be alternated with cold, each to remain on from ten to fifteen minutes—the hot compress to be always applied first. This may

be repeated as long as it affords relief; but when no benefit accrues from the hot, make use of the cold compress for five or ten minutes, then resort again to the hot, and alternate them for from two to four hours if needful. If the uterus is displaced, the proper treatment will come under the head of Uterine Displacements. An examination of the case will determine the position of the womb and will indicate the proper course.

Menorrhagia, or excessive menstruation, is another variation from the natural standard, and it is marked either by a too frequent appearance of the usual amount, or by a regular appearance every twenty-eight days of a very copious and excessive sanguineous flow. The amount of blood which is sometimes lost in these cases is sufficient to be alarming, as napkins thick and numerous become saturated, and indeed, at the least exertion a stream gushes from the vagina; and this condition may last for hours, or at intervals for days, leaving the subject prostrated, pale, and almost bloodless, only to partially recuperate before another attack is due. This condition will eventually, and at no distant date, break the constitution beyond the possibility of repair;

it may be the result of a relaxed state of the uterine vessels, an enlarged, congested womb, or of a great displacement of that organ, or it may be from a combination of these conditions; or there may be a polypus, or other growth which prevents the organ from contracting and closing the vessels from which the discharge emanates. A competent medical adviser should examine the case and decide the treatment according to the necessities. In the young this condition may be induced by excessive exercise, long hurried walks, horseback riding, and dancing for several hours in a stifling atmosphere, with corsets too tightly drawn, and with clothing hanging upon the hips and back, all of which may prevent the natural circulation and facilitate a determination to the womb.

Often all treatment during the attack can be only palliative, and to permanently overcome this affliction proper treatment must be instituted between the periods. In severe cases, where the uterus is displaced, and the organ relaxed correspondingly with the ligaments which sustain it, and the power to control the flow lost, a uterine support with a proper abdominal bandage, and accompanied by a constitutional

building-up of the system by good nutritious diet, with some preparation of iron or other tonic, will overcome the trouble in a few months' time.

All over-exertion, whether for business or pleasure, and frequent sexual intercourse, should be avoided, also feather beds, close warm rooms, hot tea and coffee; while carriage drives are conducive to health by affording an opportunity for pure air and gentle exercise.

Unless there is a polypus, cancer, or uterine tumor to contend with, the case should result favorably; but if ulceration exists it must be healed, or if a foreign body, such as a polypus, is the cause, it must be removed before there can be a favorable change. If there is no malignant disease to contend with, the following treatment will prove successful:—

First, the uterus must be made to occupy its natural position by the support referred to; this is absolutely necessary if the organ is either prolapsed or otherwise displaced. Then the daily use of the tincture of chloride of iron, 15 drops in half a gill of water, three times a day, 30 minutes after meals. Keep the bowels relaxed, so that hard feces will not collect and press upon the womb to increase the congestion

of the organ. At night use a wet compress over the back and lower part of the abdomen, wrung from tepid water ; cover the wet folded compress with flannel, and over this an oil-cloth bandage to protect the bed and clothing. In the morning wash off the surface with cold water, and wipe very dry with a coarse towel to cause capillary reaction and warmth. A faithful attention to these rules will reward the patient with the blessing of renewed health and strength ; if not, an examination should be instituted, and treatment to accord with the condition. For examination of the womb a competent physician should be called, and the rules given for that operation in the chapter on Uterine Displacements should be closely observed to obtain the desired information.

CHAPTER VII.

MENSTRUAL CESSATION, OR "CHANGE OF LIFE."

THE change of life is an important climax, and it is a period through which every menstrual woman must pass, if her life is spared to reach it.

After from thirty to thirty-five years of ovulation and child-bearing, there comes a time of rest for her own system; the ovaries cease to perform their usual functions, and the uterus diminishes in size; and, like the fruit-trees in the orchard, she ceases to bear. But her existence is maintained for other purposes; for woman has a variable mission—her sphere of usefulness is not limited to one work, however important that one may be.

This interesting change may take place at different ages, according to the constitution and other conditions; in some it will be as early as at thirty-eight, in others not until fifty,

and both classes may be in apparent health. And cases have come to our notice in which the change took place at the very early age of twenty-five, and others as late as fifty-six, for which no cause could be assigned as far as the general health would indicate.

The usual symptoms accompanying this change are a diminution of the monthly discharge, which may still occur at regular periods, but from month to month the flow becomes less profuse, until the quantity diminishes to a mere stain, then ceases altogether; while in another case there may be no perceptible change in the quantity of the discharge, but the period of its occurrence is characterized by its irregularity, varying from four to six weeks, or even from two to three months, and changing from time to time, so that there are no means of judging when the periods will arrive. Neither of these conditions require any medical advice or treatment, while in other cases the discharge at this time of life becomes very profuse, amounting sometimes to a hæmorrhage, though perhaps not at every period; still, when it does occur to an alarming extent, medical assistance may be required. Flashes of heat, followed by perspira-

tion, then a chill, are some of the accompanying symptoms of the change of life; they may commence at any stage, from the first, before any other symptoms are noticed, or not until the catamenial flow has become irregular or more scanty than usual. These very uncomfortable flashes may continue for two years, or for ten, and they sometimes increase in their severity and frequency for two or more years after the menses have ceased to appear; but much of this disturbance may be corrected by due attention to the general health of the system, for it arises from imperfect circulation: the superficial capillary blood-vessels becoming distended, the face and neck are momentarily flushed to a deep red or almost purple color, while previously to and after the attack they may be ashy pale. A gentle course of medical treatment, to increase the action of the liver, kidneys, and skin, will often prove efficient, while in some cases a more radical course is required. In consequence of this modification of the circulation, the change of life, during the transition of the system from an active ovarian state to the quiet condition of a non-ovulating girl, is often attended by serious developments of morbid conditions in other

parts of the body, which may prove very serious and difficult to control.

The ovaries, uterus, and mammary glands are all implicated in the functions of maternity, and when they relinquish their united duties, the latent forces are directed to the development of morbid conditions which have been lying dormant in the system, but which are now made to germinate into active operation; and if there should be an inherited cancer germ, it will now be aroused into activity; also, if the rudimentary conditions have remained for years in the form of a small tumour in the mammary gland, on the lip, neck, or womb, now is the most probable time for its development; or if there is any trace of insanity, erysipelas, or tuberculosis of the lungs or intestines, this is the time most liable for their development; also for ovarian and uterine tumors, paralysis, and apoplexy. Hence great care should be observed to avoid the excitement of any of these unfortunate conditions, by proper attention to all of the rules of health relating to food, dress, and exercise in the open air; all mental, religious, social, and domestic excitement should be avoided. Many at this time of life become deeply impressed with the importance of spiri-

tual culture, they become greatly interested in church matters, and permitting themselves to be influenced by the earnest appeals of their pastors, they are actuated to overtax the mind, the mental powers yield to excessive labour. This may be one phase of insanity, or the unfortunate marriage of a son or daughter may induce maternal grief, and cause the mind to yield, and all interest in life to be abandoned; or loss of property may have a similar effect.

A woman at this time of life should strive against such results by a watchful care to avoid all occasions giving rise to anxious thoughts on any subjects; and she should endeavour to fortify her physical system against the inroads of disease by proper diet, rest, and retirement; and if there is any appearance of disease, it should have judicious attention and proper remedies; all possible healthful conditions should be induced, and all hurtful ones, such as overwork and indulgence in rich foods containing fat-making elements avoided.

At this climax, adipose tissue develops in some constitutions to such an extent that weight increases in the course of one year to the amount of from thirty to seventy-five pounds above the natural standard. In some cases the

abdomen alone enlarges, and a woman, if married, not unfrequently mistakes her condition to be that of pregnancy, and her opinion is sanctioned by some of her knowing friends, or by her physician; she makes all necessary arrangements for an heir, but as time progresses, and the possible period has passed, she discovers, to her great disappointment and embarrassment, that the enlargement is due to an accumulation of fat upon the intestines, and increased by flatulency. All this will disappear in time, and reflect upon the parties a suspicion that more knowledge was required to be gained of the real state of such cases before a diagnosis could be justly relied upon.

If a woman passes safely over this change, which is fraught with so many peculiar symptoms and liabilities, which engross the mind with fearful forebodings, and often with disastrous consequences to life and happiness, she may then hope for a period of twenty-five or thirty years of a more undisturbed and peaceful existence than all her former life has yielded her.

The mental and physical vicissitudes which attend a woman's life from childhood to old age, are numerous and not always of the most

pleasant character ; the thousand annoyances of girlhood, during schooldays and years of compelled obedience to the opinions and dictates of parents and guardians, often make the girl wish these years had flown that she might stand as a responsible person, and do what her own will dictates ; and the longings of the young heart for proffered love and congenial companionship induce her to accept an early offer of marriage, believing that in the wedded state her happiness must be increased, that to have a husband to love her more than all others in the world, to be mistress of a house and home, to have the satisfaction of being in possession of carpets and 'curtains all her own, will complete her joy. And after she has settled down into a matron, perhaps when quite too young, she confidentially declares to her young lady friends that marriage is the only balm for restless nerves, and that her present state of happiness should convince them all of the great impropriety of deferring it ; she praises her liberty, her possessions, her husband's love and constant solicitude for her —exhorting them with, "Get married, girls ! and be as happy as I."

In one year's time a child is born, and such

pains as accompanied this she had never before believed that woman could endure ; but the child has come, a little son, and she is grateful that her life is spared. Out of love for her husband she gives the boy his name, and she soon forgets, or does so partially, the ordeal through which she lately passed ; so, when her young friends see her and the little son, she again declares there is no way to live happily but in the married state ; her comforts, her doting husband, her darling child, make home a heaven, and earth a paradise. Again, she earnestly entreats that they will try to comprehend the blessings in store for them under like conditions, and marry early, as she has done ; but these young girls fear some clouds may come, let the sky be at present never so clear, they suspect there may be thorns hidden among the roses, so do not decide to take a similar step until they have seen more of life's experiences.

In two years time another offspring comes to bless the happy, hopeful wife, this new accession to the family circle is earlier than she expected, although she intended sometime to have a little daughter, and now it too has come. The husband, in his gratitude for this new blessing,

calls the baby by the name of his dear wife, and she is highly complimented and happy, her cup of bliss is now brimful, and she playfully appeals to her young friends not to wait, but to marry and have the blessings of home, husband and little ones, and be blessed as she is, with just the full complement—no less, no more would suit, just a son and daughter, just all they wished for. But in eighteen months another comes ; it was very unexpected, in fact quite an accident. She now has but little to say upon the subject, and in two more years gestation must be again endured, and also labor pains and consequent concomitants which mothers know about ; and then, in a marvellously short time, another child comes to them, and soon the number is increased to five. Then her remarks assume a different tone ; now she says she is distressed, for she has not had one good night's rest since her first boy was born, there has always been an infant in her arms, or one expected. The children all cut their teeth with difficulty, all had the measles, the whooping cough went hard with them, and one she lost, which brought to her heart an anguish and suffering she had never known before, and to which all other pains were as nothing.

Now she feels her rooms are small and quite too few in number, her carpets are worn, and her curtains torn; husband is not so pleasant as he used to be, he speaks in a hasty manner when she most needs his sympathy, and he is often away from home, or too much engaged to talk to her, for the great expense of the family demands his time and thought. She wrings her hands, presses her palms to her throbbing temples, and weeps as she begs her young friends to pause and consider before they leave their homes at so early an age; for marriage and maternity are not a romance, but an experience which the young cannot know, except as they watch the progress of such as have ventured to accept the claims and to learn by practical trial that "Life is real, life is earnest."

And many thus pass on until ten, twelve, or even fifteen children have been born, with an accumulation of troubles to correspond, and at times they have been discouraged, and almost, or quite, insane, and they have felt that there was no justice in God's dispensation if woman was assigned a life of pain, sorrow, and ceaseless toil, and if that was to be the whole of woman's pleasure here on earth. But after these years have passed, and the climax of her

womanhood has been reached, when there are no more children to be born, no more teeth to come, no more measles or whooping-cough, and no more babies' deaths to break her heart. Now the numerous sons are grown up to fill useful and important posts, daughters are married, and "Mother" is left alone again to the renewed love of her husband. The house has been enlarged, new curtains and carpets take the place of what had worn away; and the husband, through all these years, has worked with one great aim in view, that when the wife and he shall have come to the middle age of life they shall have a home free from debt, and with all the comforts he can get to make their last years the most joyful of all their wedded life. Now his love for her may occupy his heart and mind, though at one time business cares had quite suppressed it, and the twenty years to come may be like the harvest-home of their existence, the most quiet and contented time; and now it is that such enjoy themselves. Now they have leisure to read, think, and talk on subjects congenial to their age and development; now is the time for them to lay aside the more worldly cares, and to let the intellect have opportunity to grasp what may be learned in social life, or

from public lectures ; and money-making and hard labor should now be transferred to younger people, while the elders enjoy the full fruition of their past lives of labor and anxiety.

When parents arrive thus far on life's journey, they should occupy almost the position of household gods, and all should be done to give them every possible ease and comfort in their declining years. "Mother" should now have the easy chair, while the daughter occupies the harder one ; the first ripe grapes and other dainties should be brought for her, and the earliest flowers should deck her room ; for every little thoughtful act and kind attention is due to her who has endured so much for the comfort of her children, and now is the time for her to be recompensed for her life of self-sacrifice by the fondest love and greatest care.

"Mother's" words should have a weight which no other words can carry in the way of advice and counsel, for the lessons she can impart have been gained from life's experience, and they should be treasured by her girls as "apples of gold in pictures of silver."

And when her strength of body and mind begins to wane, and her faculties to decline, she must not be thought a trouble or expense, but

her girls should prove to her beyond a doubt that the greatest pleasure they can enjoy is to make her happy, from whose existence theirs was gained, and by whose care it was sustained through helpless, dependent childhood.

CHAPTER VIII.

UTERINE DISPLACEMENTS.

THE uterus is so located as to be very susceptible to a change of position, from the very fact that this organ is subject to such changes through the natural causes of pregnancy and parturition. In its normal, quiescent state it occupies a slightly oblique position at the upper part of the vagina, into which the os, or mouth opens.

The neck of the uterus settles into the vagina about three-quarters of an inch, is completely surrounded by it, and connected with it. The vagina and uterus together form a part of a circle, the bladder lies to the front, and the rectum to the back of both, and all are intimately related, by their position and connecting tissues ; this circumstance renders a complication of symptoms when any one of these organs becomes affected by disease or displacement.

The usual forms of displacement are pro-

lapsus, or falling of the womb; retroversion, anteversion, retroflexion, anteflexion, and the right or left lateral versions, with the varieties of degrees.

The symptoms of displacement, as we have before said, are very similar in the different phases, and yet there are characteristic points which in some cases we find strongly marked, while in other cases of an equal degree of displacement these peculiar symptoms are almost entirely wanting; much depends on the constitutional sensitiveness of the patient. We have met with cases where the patients suffered much more pain, and that of a more characteristic nature, when the uterus was displaced but two inches, than others do with procedentia, or when the organ had passed externally.

The most pronounced symptoms of uterine displacements are, pain in the lower part of the back, increased by standing; pain in the right or left side in front of the ilium, or hip, sometimes in one side only, at others the pain alternating from one side to the other; a disposition to support the abdomen by the hand when walking or standing; a feeling of internal strain, or, as has been very correctly expressed, "a coming down feeling," which sometimes

cramps the body, and for the time prevents locomotion, and every slight over-exertion will induce a return of the same symptoms ; a “ gone ” sensation at the stomach, a sense of falling in the abdomen, or from the waist ; pain on the top of the head, with heat, pain and heaviness at the back of the head and at the back of the neck ; weakness and trembling of the lower limbs, coldness of the feet and flesh of the thighs ; cold back and abdomen ; the memory becoming defective, disability to think connectedly ; also forebodings and melancholy are frequent accompaniments of uterine displacements, causeless attacks of weeping, and the mind so sympathising with the body, and often to such an extent that life becomes so great a burden that evil thoughts of self-destruction overpower the victim until a sense of danger and apprehensiveness constantly excite her fears, and when in the house alone, or walking in the street, she is in dread of encountering imaginary dangers, until at length she avoids society, yet fears to trust herself alone, and with sharp-edged instruments, lest the temptation to make an improper use of them should be too strong for her to resist ; or else a phase of religious mania may attack the subject, and

constant dread of future punishment, or of utter banishment from the future home of the good and just by the Judge of all. These mental symptoms are to be dreaded more than actual pain, of which there is sometimes but little, or it is so slight in the local parts that the real cause for the existing troubles is overlooked, and the patient either becomes a raving maniac, or, by the general giving way of her vital forces, she becomes a confirmed invalid, and all the conditions of old age are established, and a painful, useless life is the result, when the opposite should have been her experience if in good health.

Displacements of the womb, of whatever type, being accompanied by very similar symptoms, it is impossible for either the patient or the physician to decide by the personal report of the case without a proper digital examination ; and the only rational and satisfactory manner of instituting an examination of displacement is to have the patient in the erect, or standing, position, although it is the almost universal custom to examine the patient when reclining upon the left side or upon the back, neither of which positions can afford opportunity for a correct diagnosis of the state of the patient

when walking or standing, at which times the sufferings are usually very much aggravated; but while lying the pain is assuaged, and comparative comfort is restored—an evidence that under such circumstances the organ must assume the more natural position.

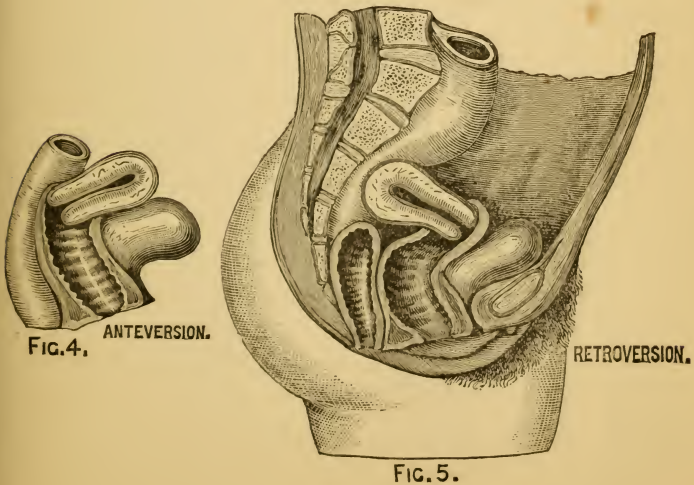
Although counter to the usual plan for this important operation, we do most emphatically recommend that the physician or nurse adopt the following method, as being the most certain of satisfactory results. With olive oil, or some bland, unctuous substance, lubricate the index finger of the right hand, kneel upon a rug or folded towel before the patient, place the hand under the garments to the vulva, pass the finger from the perineum, or smooth space between the anus and posterior border of the vaginal orifice, let the finger gently glide to the orifice, and with all due care against unnecessary irritation pass over the folds of the vagina until the os uteri is discovered. The uterus, when discovered, if healthy and in its normal position, will be found to lie at the distance of four and a half to five inches from the orifice of the vagina, and with the smooth, slightly oval cervix, or neck, inclined towards the back, at the most extreme point of which will be dis-

covered the little round or oval slit which is the os or mouth of the womb.

To make this interesting organ more definite to the explorer, we will describe it as resembling to the touch the end of the nose in shape and density, for the mouth of the womb would feel to the finger very similar to the soft cartilage at the end of the nose as one presses upon it.

Any deviation in the shape, texture, or position of the uterus may be almost momentarily discovered by a sweep of the finger over the surface of the vagina in contact with the organ; and with a little practice the finger becomes sensitive to any alterations, and a correct estimate may be made in this way. The length of the index finger may be measured before the examination, then the distance at which the os is found from the orifice of the vagina will be determined by the depth the finger has passed, whether it be to the extent of the first joint, the second, or the whole length of the finger, with or without pressure, for pressure upon the soft, yielding parts at the orifice will facilitate the passage to fully an inch or an inch and a half higher than the passive introduction would do. By a gradual and gentle sweep of the finger while in the passage, the exact position may be

determined as to the locality of the body and fundus of the uterus; if the mouth of the womb is lying very close to the back, or concavity of the sacrum, by tracing the finger horizontally to the front, the body of the womb may be found crossing the vagina, and the fundus, or upper part may be pressing upon the bladder, which position is called anteversion, as in Fig. 4; or if, on the contrary, the mouth of the womb is found to the front, near the bladder, and the fundus falls to the back, and feels to the finger like the large part of a small gourd, the position would be recognised as retroversion, Fig. 5.



Then if there should be a bend at the neck of the womb, as one could easily distinguish by tracing from the mouth of the organ upwards to the back; if the heavy part of the organ were at the back of the bend this would be retroflexion (Fig. 6); but if the fundus, or heavy

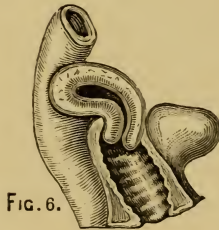


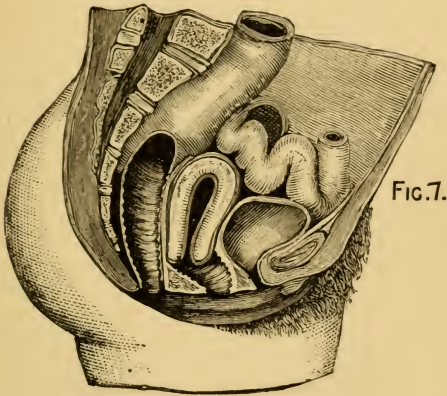
FIG. 6.

RETROFLEXION.

part, turned towards the front it would be ante-flexion. When the mouth of the womb is found to the right of the medial line of the vagina, and the womb lies across the vagina so that the fundus may be felt to the left, it is known as the left-lateral version. Or if the mouth is to the left, and the fundus to the right, it is the right-lateral version; and any degree of displacement must be considered by a close observation of the case.

The downward coming of the os is an indication of prolapsus, or falling of the womb,

which may exist in various degrees to almost any imaginable position; for instance it may be one half-inch from the vaginal orifice, as in Fig. 7, or to a level with the perineum, or pro-



PROLAPSUS.

truding through the mouth of the vagina, as in Fig. 8; or even passing outside the labia and falling between the thighs to the distance of from three to eight inches, as in Fig. 9—which represents the entire organ encased in the inverted vaginal canal, forming a tumor-like mass as large as the egg of a goose, or the head of an infant at birth; this is called *procedentia*. These last described cases are not infrequent. Many women endure this sad affliction for years,

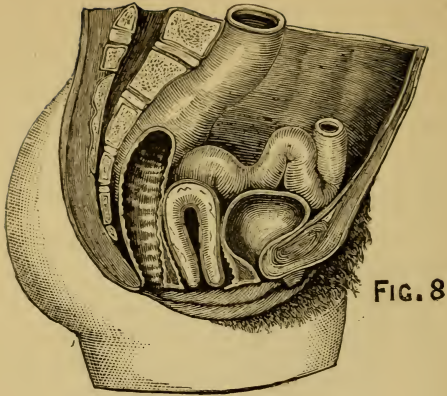


FIG. 8

PROLAPSUS, MORE SEVERE.

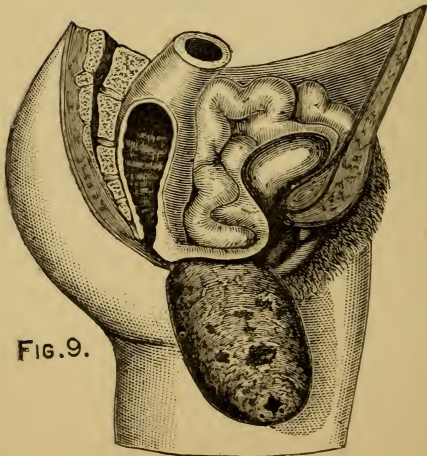


FIG. 9.

PROCIDENTIA.

and some, after every effort for assistance had proved futile, have submitted to what was supposed to be an incurable condition, while others who shrank from the necessary examination by a male physician never had any treatment; and, in fact, in many cases such have never informed their dearest female friends of their unfortunate condition, and have suffered and endured for years, with complacency, all of the pain, inconvenience, and distress such an affliction must necessitate. And yet in face of all these facts there are too many thoughtless, unsympathetic persons who declare women to be “ever-complaining creatures,” “chronic complainers,” and many times the agony experienced for one hour by this class would not be endured with the quiet patience that others bear for years.

In complication with displacement, and often as the result of it, there may be a congested, swollen condition of the uterus; the whole organ may be implicated, or more particularly the neck and mouth; these portions of the organ being more largely supplied with blood, and the most pendent are more obnoxious to such conditions than the body and fundus would be.

The lips of the womb are sometimes greatly

swollen, and the mouth sufficiently relaxed to admit the index finger to the first joint, and the circumference about the neck would then measure three inches, as may be diagnosed by the sweep of the finger from side to side over the surface of the lips, and then about the pending neck; these parts may be sensitive or not, as the case may be; or the back part, just posterior to the bend of the neck in retroflexion may be swollen and very tender to the touch; or in anteflexion the tenderness will be in front of the neck; all of these varieties from the normal standard must be taken into consideration when the case is being examined, as the success of the treatment greatly depends upon a correct diagnosis. If there should be a tumor or unusual enlargement of the womb or of the adjoining parts, whether fibroid or cancer, the treatment for displacement with hope of cure would be of but very little use, in fact it might be absolutely objectionable. Where congestion or inflammation is detected there should be means resorted to for overcoming the same by the use of proper lotions, and medicated injections. As to what medicines shall be used depends much upon the condition of the parts, and of the general system.

As an accompaniment of prolapsus, or falling of the womb, even when but to a moderate extent, there will be pains in the back from below the waist to the seat, and often of a more severe nature just at the termination of the spinal column, this distress being increased by walking, and still more by standing, but relief will be obtained by lying, which fact inclines the sufferer to adopt this position for the sake of partial freedom from pain, and unless great resolution is brought to her aid, she unconsciously becomes bedridden, and the couch or bed are daily and hourly resorted to for the coveted relief, until this becomes an evil almost as great as the disease itself. The limbs are very cold, and tremble when she walks, the back and abdomen are cold, and there is a puffy development under her eyes, and a dull expression; the eyes often feel as if they were being drawn backwards into the head; all of these symptoms are greatly increased by exertion, mental trouble, or loss of sleep; the slightest strain upon the nerves will heighten some or all of them—the lifting of a chair, the cutting of bread, or even the pouring out a cup of tea seems too much for her; the lifting of a jug of water, in fact often the cutting of her own

food is too great an exertion, increasing all the sufferings.

Frequency of urination is also an almost constant accompaniment of displacement, while in the majority of cases the complication of indigestion, flatulency, loss of appetite or nausea, constipation, and general weakness render the subject a confirmed invalid independently of all the menstrual disturbances in connection with this displacement; she is unfitted for business, social life, and almost for existence, the force of which is to her so palpable that life becomes, indeed, most unwelcome, and she would gladly give up the few endearing ties which may bind her to earth, to rid herself of all this retinue of maladies which daily increase to make her life a burden instead of a blessing, as it otherwise would have been had her health been preserved so that she might have been of some use to her family and friends.

If these symptoms are not duly arrested, the end will be a confirmed invalid to care for, who would rather die than live, a constant charge upon husband, parents, or friends; or a premature decline and death; or else a maniac, which is a case worse than death—a terror if among her friends, or a subject of constant

oppressive anxiety and concern if banished to the seclusion of an asylum for the insane ; all of which calamities might have been averted if the case had been understood, and if the patient had been the recipient of proper and timely treatment.

CHAPTER IX.

FALLACIOUS TREATMENT BASED UPON ERRONEOUS DIAGNOSIS.

IN this chapter it is not our desire to prejudice the reader against her medical adviser, or against any member of the profession ; but on the contrary, to inspire her mind with faith and confidence in the one who may wisely prescribe for her ; and at the same time, to awaken her understanding to a knowledge of her true condition, that she may discern the right from the wrong prescriptions which may be advanced for her adoption, so that as she proceeds with the treatment, it may be with a greater hope of success than when she knows nothing of the cause of her troubles, or why she must follow certain given rules of her physician. This subject would require a lengthy chapter if the details of irrational prescriptions were indulged in, but time and space must not be encroached upon to the

exclusion of more practical matter. Yet it must be touched upon that such as shall read these pages may have warning, and be placed on their guard against a routine of fallacious treatment which should have been long since abandoned, or should never have been adopted.

We can readily understand why the cause for many of the symptoms which we have described in former chapters has so long remained in comparative obscurity, and why patients have failed to convey the proper intelligence to the minds of their physicians ; this has been largely owing to the barrier of sex ; for man has held the prerogative of being the medical adviser of woman until within the last half century (except in the earlier days of medicine, before there had been much scientific knowledge gained in reference to the structure and functions of the generative system), hence vague ideas have been for many years and generations entertained with regard to the real condition of the female sex, through the delicacy of both the patient and the physician (which natural delicacy was meritorious to both), and opinions have often doubtless been formed without sufficient investigation having been made to warrant a correct diagnosis, and the real cause

has not been suspected, for the symptoms were supposed to indicate some disturbance only of the organs to which they pointed. And authors have been quoted to uphold the statements made, and so generation after generation continue to quote the authors of darker days, and the disposition to adhere firmly to the opinions pronounced by those savans has been a screen between the mental perception and the more modern and enlightened physiologist, and the result has been many a life sacrificed, many a home made desolate by the early demise of wife or mother. Whereas, if woman had long ago assumed her rightful position as physician to her own sex, and had labored diligently to possess herself of all the scientific knowledge stored up for her, and had resolved to search the human system for new truths, rather than to abide by the cut-and-dried opinions of her male predecessors, to-day women would have had more healthy bodies, and life might have been desirable where now, in many cases, it has ceased to be so.

Yet we must, in due respect to the great achievements which have been gained, award a large amount of credit to the acumen and sound judgment evinced by many of the more modern

physicians of the male sex, who have dared to press their investigations beyond the popular line, and have boldly asserted what they have more recently discovered in regard to the diseases of women ; which course must encourage others to rend the veil of darkness, which has so long hung like a pall over the understanding, and induce them to insist upon more thorough investigations and examinations before they venture upon prescriptions. And to resolve that as they of the male sex are now, to a great extent, the physicians for women, and perhaps, to a great extent, for generations will be, yet that they may hold this honourable, though unnatural, position to advantage, they must insist upon the opportunity for necessary examination, and not wait for the patient to suggest it when she intuitively believes it to be needful ; or if she refuses to be questioned and examined, that they will pass no judgment on the case, and positively refuse to prescribe until she gives them such opportunity. The conscientious medical adviser or physician of either sex will do what is for the patient's good ; and if there is not sufficient moral courage on the part of either the male or female physician to assume this position, it will be wise and just to relin-

quish at least that department of practice wherein justice cannot be done to the suffering patient.

Many of the most prominent symptoms of uterine displacement are accepted by physicians as indications of diseases often quite foreign to the real seat of suffering. One organ is so closely allied to another, and the sympathy between them is so general, that symptoms are too frequently considered as the primary affection; for instance, the consequent pain in the lumbar regions, or small of the back, is treated as lumbago, or as an affection of the kidneys; the abdominal pain in the hypochondriac region between the medial line of the abdomen and either the right or left ilium, or hip bone, is established, and is often so circumscribed that the ends of two fingers may cover it; and this, even by the physician, is often accepted as a sign of local ovarian disease, either congestion or inflammation of one or of both ovaries, and is too often treated as such with counter irritants, mustard plasters, blisters, tincture of iodine, or hot poultices; none of which, under such circumstances, will afford more than a partial, temporary relief; and as a last resource, when such treatment has failed, the proposition for

ovariotomy, or the removal of the offending ovary is suggested, and we are sorry to have to record that this operation has too many times been performed upon poor, suffering, credulous women; and after all this sacrifice and danger to life by this partial or whole emasculation, the much hoped for benefit has not come; nothing has been gained, but much has been lost; even life itself may be sacrificed by such experiments.

Again, in prolapsus the dragging sensation from the umbilicus or navel is often a marked symptom, also the "goneness" at the stomach, and the frequent desire for food, with but slightly improved condition after eating or drinking, is often mistaken by the patient and by the physician for some peculiar phase of indigestion, for which, on account of the faintness and exhaustion, the doctor will prescribe beef-tea or some nutritious food, and particularly a tonic, or in too many cases a stimulant, wine, beer, or stout, all of which will fail to afford more than temporary relief; for these feelings are produced by the displacement of the womb, followed by a sinking of the intestines, then the stomach, and every organ above it must suffer. Hence the fallacy of such an erroneous and even disastrous course of treat-

ment, which, given to afford momentary relief, may arouse a taste and a supposed necessity for ardent spirits, and the end may be worse than death—intoxication, and ruin of body and mind.

Then, too, the heart will be a source of much inconvenience and anxiety, for the occasional pains and exaggerated action often suggest to both physician and patient symptoms of organic disease in that organ; then comes the list of remedies as useless and absurd as the diagnosis has been; and, in fact, if they are persisted in for any length of time, they will prove very injurious to the system, for such remedies as aconite and digitalis are deadly poisons, and inadmissible under such circumstances.

The lungs too are in great sympathy, and respiration is often materially interfered with, particularly when walking up steps, or when ascending a hill, even of no great height. The heart and lungs often both seem to be greatly disturbed when upon level ground, or while in the sitting posture, and even while upon the bed these attacks may come; sighing, long breaths, or making an effort to inspire deeply is difficult to perform, and then much anxiety is experienced on the part of patient and friends, and watchful attendants are provided lest

sudden death may occur either by day or night. But in reality, all of this thoracic or chest trouble is the result of prolapsus of the womb; and through the actual displacement of the abdominal viscera, the diaphragm or midriff (the partition between the chest and the abdomen) has not the natural tone, or the power to contract and relax alternately, as is its usual custom in the healthy condition, hence heart, lungs and stomach must suffer in proportion to the extent of the prolapsus, and more through the length of time it has been standing, for one by one these symptoms present themselves, and often baffle an expert in the diagnosis; and following these symptoms is a tendency to stoop in sitting or in walking; the pain and heat in the top of the head, and a straining feeling in the back of the neck become sources of great suffering, then rheumatism, neuralgia, or spinal meningitis is supposed to be the malady, and treatment to correspond is prescribed. We have known the seton to be introduced in the back of the neck to excite a discharge, with hope of cure, but not even temporary relief was afforded by such harsh means. The womb is the seat of such disturbances, for though it may be distant, it is in close sympathy with other parts, and the

symptoms we have described are strong diagnostic marks, as are also loss of memory and self-confidence, with an increasing disability to converse, for want of the power to remember names and circumstances. Therefore the victim of these misfortunes seeks retirement from society, if not absolute solitude, and she becomes melancholy, apprehensive and monomaniacal, suicidal and nervous, and a certificate of insanity and the mad-house may be her fate. She fears to walk alone, and refuses carriage drives; she is subject to hysteria, has uncontrollable fits of grief or of rage; laughs or weeps without apparent cause—then hysteria is pronounced by the physician to be the name of her malady; and the attendants, whether nurses or friends, are ready to bow their heads to this opinion, and say, “Yes, hysteria, we told you so! and that is all—she ought to know better—just hysteria!” Ah, my dear reader must know that hysteria signifies the result of some form of uterine disease, of which it is as legitimate a symptom, and almost as uncontrollable as the shaking fit of an ague chill, or the subsequent fever; and when the cause is removed the hysteria will cease. This is not a condition to excite mirth or ridicule, it indicates great

nervous prostration from the causes we have given.

Sometimes, where a more rational view is taken of the case, and where the proposition is made to reduce the misplaced organ to its normal position, the means resorted to for that purpose are quite ineffectual; in truth, they often prove to be an addition to the complication which existed when the case was first presented, as the following not infrequent prescriptions will demonstrate—rest, absolute rest, lying on the bed or couch from three to six months, with the hips elevated, to facilitate the reduction of the womb to somewhere near its normal position; which remedy, if followed, would only render the patient a greater invalid by the prolonged inactivity of her muscles; the digestion would become impaired, the flesh would soften, and the nerves suffer from the close confinement; so that at the end of the term, if the woman had not been an invalid when she took to her bed, she would be after this long period of retirement.

If the patient is a married woman, an increase in her family is often a promised cure; or if she is single, marriage is too often declared to be the only source of help. Both of which courses,

if carried out, might result in an increase of the disorder instead of in an abatement of it. But if the physician would add, that should the married patient have a child and afterwards observe the greatest care not to arise or exert herself for several weeks, then if this prescription were strictly carried out, the uterus might have an opportunity to resume its normal state, and there remain, and thus afford much relief. But the mere fact of pregnancy and parturition, under ordinary circumstances, is not usually fraught with much success as a means of cure. Then the idea of bearing offspring in an unfavourable condition of ill health is most repulsive, and contrary to all the natural feeling which should actuate rational beings to procreate with a hope of healthy, well-formed children; and although we are willing to admit that improved health does sometimes follow maternity, yet it is most unwise, and most selfish to resort to it as a remedial agent in case of disease, and thereby to transmit conditions favorable to ill health through the weakness of the maternal organisation. And to marry for a cure is often equally, or more disastrous to a woman's health and happiness, for here is a three-fold evil: the husband is deceived

and made unhappy, helpless offspring must suffer from inherited weakness, if not from absolute disease, and the wife is often found a few years after marriage in a much more deplorable condition of health than she was before. Young women should secure health before accepting such a responsible position as that of wife and mother, when, as facts demonstrate, many women of robust health before marriage date the commencement of their afflictions from this event, or from its results. So it would be much wiser of the physician if he were to add to this favorite prescription for his unmarried patients, that with the best of care and with the companionship of the most gentle and considerate husbands, some young women might be surrounded by more favorable conditions for returning health; but this most important part is omitted, so the sufferer infers from the advice given, that in marriage alone is the desired remedy. When physicians see the time arrive when all, or the majority of married women, shall be in the possession of good health, then they may prescribe marriage as an infallible remedy for this disease.

Others, viewing the case differently, would

advise the use of instrumental support, but the choice of the instrument is often such as to injure the patient and to increase the liability to a greater displacement, by the distension of the vaginal passage, and by paralysing the walls of the vagina through pressure, among which cotton balls, sponges, curled hair and sea-grass, or such instruments as rings of gutta-percha or metal, balls and discs of different sizes, oval rings, straight stem pessaries of porcelain, glass, wood, and soft rubber, each named in honor of its distinguished inventor, and each supposed to supersede its predecessor in some marvellous qualities of size, shape, or material, until the surgical shops are replete with these wonderful specimens of art and ingenuity, and one would be induced to believe that much talent had been expended in the invention of something to assist kind Nature in the restoration of the female sex to wonted strength and ability. But many of these contrivances are as futile in their power to support the uterus in its natural position as a chair, ladder, hoop, or pillow placed in front of an open door would be in keeping a child in an opposite part of a room; by such an arrangement there would be nothing to prevent the child from coming to the door,

or, in fact, from leaning over the chair which only blockades the door. So the many pessaries, or uterine supporters, in common use, only prevent the uterus from protruding through the orifice of the vagina, and they generally do but little to return the organ to its natural position. The difficulty of adjustment and removal by the patient of any of the instruments herein described renders them still more objectionable. The constant application of a pessary both day and night for months and even years is very unfavorable to cleanliness and health, and the constant pressure upon the sides of the vagina for its support must so weaken and relax the delicate tissues to necessitate an enlargement of the instrument, or for an exchange for another style of greater magnitude, as in one case that presented herself for some assistance, where we discovered a round, flat glass pessary, fully three inches in diameter, and after its removal we found still remaining a small size, which, after its removal, to our astonishment another still remained. These all varied in size, and one fitted into the other to establish height, and thereby to send the uterus to a higher place in the pelvic cavity, which cavity at the same time was being converted into a glass warehouse.

The cotton and sponges are useful to convey remedies when of a proper quality and size, but either should be daily removed, and neither can prove efficient as actual uterine supports unless the size be inconsistent, for the walls of the vagina yield and become so relaxed by constant use that pieces of sponge of enormous dimensions must be resorted to. We removed one from a patient that was 17 inches in circumference, and for seven years she had been a victim to both prolapsus of the womb and to medical treatment. These sponges were adjusted by her physician, and were retained until, through the process of disintegration, they gradually came away. And thus our sex have suffered and do suffer at the present time; and, with the hope of cure, some who have borne the various courses prescribed for them by their numerous advisers at last have yielded to the surgeon's knife, and have suffered the operation of either occlusion, or closing of the vagina, or of what they suppose to be shortening of the ligaments of the womb, with the effect to increase rather than to mitigate their suffering.

CHAPTER X.

TREATMENT OF UTERINE DISPLACEMENTS.

AFTER the case has been rightly diagnosed by the rational system of investigation, as given in a preceding chapter, and which may be herein repeated, that the patient shall first assume the erect position for a satisfactory examination, then the physician may kneel, and pass the lubricated index finger of the right hand into the orifice of the vagina, and search gently, but persistently, for the os uteri, then take cognisance of the neck, and secure all necessary information in as short a time as possible ; and particularly must he ascertain if there be any degree of flexure to the back, or to the front, or if the mouth of the womb lies on the medial line of the vagina, or if it lies to the right or left ; next, if the mouth of the womb is normal, or enlarged, soft, or unusually hard, whether swollen or pointed ; all of which conditions may be detected in much less time

than is required to write these directions; but from such an examination much useful knowledge may be gained which will be most valuable in prescribing for the case. Then, that the exploration may be completed, the patient should lie upon a bed or couch, with the limbs drawn up and the feet upon the bed, and the finger should again be inserted into the vaginal cavity to ascertain the position of the womb under such circumstances, and to particularly determine if there be much, or any, disposition to retroversion or retroflexion, for both, if existing, would then become more palpable to the touch than when the body was erect.

After all satisfactory intelligence has been acquired, the first and most prominent indication would be to restore the organ to its normal position, which, when secured, will afford almost instant relief, and if it be persistently retained will after due time, and with proper constitutional treatment, be followed by a permanent cure. After many years of experience, we have found no uterine supporter possessing so many advantages and so few objectionable points, as the Spring-Stem Pessary, an improved American invention, patented in England, France, Germany, and other countries, by

Geo. E. Harrison, M.D., which, by its many advantages over all others, has won the admiration and hearty sanction of all members of the medical profession to whom it has been submitted, as well as golden praise from the numerous suffering women who have benefited or have been cured by its use. A full description of this instrument will here be appended, that the reader may fully understand the principles upon which it works; and directions will be given for its use under all circumstances of displacement where an instrument can be used to advantage, and that she may become acquainted with the different forms calculated to be used under the circumstances indicated.

The form of the cup set upon the stem is of great advantage, as the back part rises above the front, and thus places the womb and holds it in its normal position during the entire period of its use. Then also, the ease with which the patient can adjust and remove the instrument renders it most desirable, as the constant retention of any foreign body in the vagina, day and night for years, or even for months, as we often find in the case of rings, cradles, discs, and instruments of other designs, is productive of irritation and inflammation,

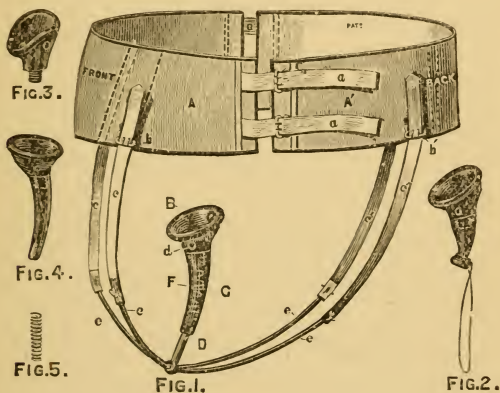
and, even if these could possibly support the pending organ, the vagina needs rest from the application of any instrument, and the uterus should be permitted to be free from pressure during a part of every twenty-four hours; and the removal at night, which should always be attended to, gives the opportunity for a free use of the vaginal syringe for the application of lotions if required.

Full instructions as to how to adjust and remove the instrument is here introduced, with cuts to illustrate the use of the different designs.

Fig. 1 represents, in perspective, the belt or band, with the pessary properly attached. The belt is made in two parts, AA^1 , and cut to fit the body accurately over the hips. The two parts of the band are connected by silk elastic bands, aa , and buckles, while separate buckles, b and b^1 , are attached to the band in front and back, adapted to receive straps, cc and c^1c^1 , which pass down between the thighs and are attached to two rubber tubular straps, ee , which, passing through two holes in the lower part of the piston D , support the pessary.

The pessary is about four inches long, and composed of hard rubber vulcanite. The upper

part consists of a cup, B, perforated with three side holes, *d*, sufficiently large to allow the menstrual and other discharges to escape. The



cup screws into a curved hollow cylinder, C, in which is a small spring, F, which rests on a curved piston, D, which has about half-an-inch play within the cylinder.

Fig. 2 represents the short stem screwed on to the cup, with string attached.

Fig. 3 represents cup used for retroversion or falling of the fundus of the womb to the back.

Fig. 4 represents cup used for anteversion or falling of the fundus of the womb to the front.

Fig. 5 represents the spring.

General Remarks.

The bands are made of the very best drab-colored cordelle, satine, and best silk elastic. They are bound with silk ribbon of the best quality. The bands are of the following sizes ; *i.e.*, 28, 30, 32, 34, 36, 38, 40, 42, and 44 inches. They are stiffened with whalebone. The cutting of the band is unique and original, and will fit perfectly.

The spring in the stem is made of finest steel wire, covered with three coats of nickel plate. There are only two other pieces of metal about the pessary, namely, two rivets, both of solid silver. One extra set of rubber tubes and two extra springs accompany each instrument. A little hard rubber attachment, or short stem, to be screwed on to the cup is also furnished (Fig. 2). The cup thus arranged is worn after the first two months of pregnancy, when the long stem is discarded, and also during the discontinuance of the pessary at the close of the time stated, when the vaginal walls, clasping the edge of the cup, afford a gentle support. The short stem is to be removed by means of a cord attached to the knob. The cups are of the following sizes :—

No. 1	$1\frac{1}{4}$ in. diameter.
„ 2	$1\frac{3}{8}$ „ „
„ 3	$1\frac{1}{2}$ „ „
„ 4	$1\frac{5}{8}$ „ „
„ 5	$1\frac{3}{4}$ „ „
„ 6	$1\frac{7}{8}$ „ „

In ordering, state the number of inches of tape passing around the extreme upper part of hip-bones.

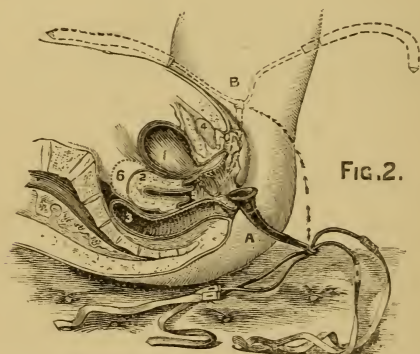
DR. HARRISON'S PATENT SPRING-STEM PESSARY.

Directions for Using.

Oil the cup and stem with olive oil. Lie upon the back on the bed, the thighs separated as far as possible, heels drawn well up towards the body. With the thumb and index finger hold the lower edge of the cup, stem pointing downwards and resting on (or near) the bed near to the body (position A, Fig. 2). In this position crowd the high part of the cup into the mouth of the vagina until the lower edge of the cup shall pass under the pubic bones (4).

Then raise the lower end of the stem until the stem is nearly vertical (position B, Fig. 2). Make the change from position A to position B without withdrawing the cup in the slightest.

From position B press the pessary into the body, keeping the stem elevated all the time, being careful not to incline the small end of the stem in the least towards the bed or a horizontal position.



1. Bladder. 2. Womb prolapsed. 3. Rectum.
 4. Pubic Bones divided. 5. Vagina.
 6. Natural position of Womb when Pessary is adjusted.
 A. FIRST POSITION. B. SECOND POSITION.

If the mouth of the womb lies to the right of the middle line, after the stem has been elevated, draw it to the left and press the cup down and to the right.

If the womb lies to the left, glide the elevated stem to the right and direct the cup to the left. In either case, this ensures the passage of the mouth of the womb into the cup.

When properly inserted, only that part of the stem through which the rubber tubes pass should protrude from the vagina. Then arise and put the band on (over the drawers), and buckle the straps loosely into the corresponding buckles, beginning at the front. Now draw the lower end of the pessary gently to the front, and then press it firmly upwards until only the extreme lower end of the pessary is outside the lips of the vagina; hold the pessary firmly in this position and draw the back straps moderately tight, and then the front ones. The back straps should be a trifle tighter than the front ones. To avoid turning the pessary in the body, the two back straps should be buckled evenly and the two front ones evenly. The rubber parts of the straps must not exceed three inches in length in front. That part of the band with the two parallel pieces of bone close together and in the middle is the back; the other piece is the front. Buckle the band over the hips, the upper edge of the band being a little below the top of the hip bones. When the band is on, be very careful to have the buckles in front and behind equally distant from the median line of body.

When the fundus or top of the womb falls to

the back, as in retroversion, a retroversion cup may be used by following the above directions.

When the fundus or top of the womb falls to the front, as in anteversion, an anteversion cup may be used by following the same general rules until the entire cup has passed into the orifice of the vagina, after which turn the stem round until its concave part and the short straps come to the front. Then elevate and press as described.

Directions for Removing.

Unbuckle the straps from the band. Lie in same position as for inserting. Gently withdraw the instrument until the thick part of the stem is reached. Take hold of the thick part of the stem and gently withdraw it, moving the stem from side to side at the same time. When the cup is at the vaginal orifice, press it down and out with the thumb.

General Remarks.

Insert instrument every morning before getting on the feet. Remove it every night after going to bed. While in bed, turn to one side and wash the pessary thoroughly, unscrewing the cup and washing the spring and the

cavity in the stem. Occasionally, a little Condyl's Fluid or weak solution of carbolic acid may be added to the water to prevent offensive odour. Leave cup and stem separate during the night. Oil the spring and thread of screw on the cup before putting together. Use the pessary while menstruating. Screw the short stem on the cup and use after first two months of pregnancy, if needful. Discontinue the pessary by the use of the short stem for the last two months. The cup with short stem is to be inserted into the vagina and pressed deeply into the passage by the index finger on the end of the stem, at the same time holding up the end of the stem by the cord attached. This is to be removed by drawing on the cord tied upon the knob of the short stem. From six to nine months' daily wear will generally effect a cure. The band should be worn for six weeks after the long stem is abandoned. The extra tape straps are to wear when the long stem of the pessary is discarded, to prevent any possibility of the band slipping up. If you have lower end of pessary too far back, it may cause pain in lower part of abdomen with frequent desire to pass water. If too far front, it may cause pain low down in the back:—To avoid both possibilities have lower

end a trifle in front of centre of vaginal orifice.

The application of the pessary is not difficult or painful for a married woman or a mother, but in the case of a virgin, or when the hymen has not been ruptured, there are more difficulties to contend with, but even then there is seldom any necessity for anæsthetics. The choice of size of pessary will depend upon the condition of the uterus, rather than upon the size of the patient, or of the vaginal orifice. However, for a virgin, or when the hymen is intact, the No. 1 or smallest size will probably be the most suitable, and the hymen is usually ruptured in the operation of its introduction. To facilitate the insertion of the pessary after the patient has assumed the required position of lying on her back upon the bed or couch, with the knees elevated, with olive oil, the nurse or physician should lubricate the index finger and gently press open the vaginal orifice until the finger can be admitted to the extent to ascertain the exact position of the os uteri, and the nature of the displacement when on her back, so as to be able to advise her in reference to the manner of applying the cup to the womb. If there is no retroversion or flexion

of the womb, the plain No. 1 cup would be the choice. When the cup of the pessary has been lubricated, by a gentle persistent pressure of the high edge of the cup into the vaginal orifice it may be made to pass, then by continuing the pressure the lower edge of the cup will be felt to slip under the pubic arch, when all feelings of pain, if any, will cease, and by very closely following the given directions the final adjustment will be completed.

Great gentleness and patience must be manifested by the operator, for all of this new experience with an invalid young woman is more than her timid, sensitive nature can well endure, yet as the treatment will ensure her coming health and happiness, she will have courage to permit what is for her greatest good.

If from any circumstance the hymen had been ruptured, as from injury, or from some previous examinations, and a No. 2 cup can be almost painlessly introduced, it should be selected in preference to No. 1, or even the third size might be the most appropriate, for the reason that either of these sizes would be more certain to take up the os uteri. The smallest, or No. 1 instrument, is frequently exchanged for No. 2 or for No. 3, when there is a difficulty

in taking up the womb in the cup, as when the mouth lies low in the back or to the right or left side of the medial line, and by a digital examination a woman may often ascertain this necessity. If she finds the mouth of the womb outside of the cup, and she has followed the rules for its insertion, she had better secure one of a larger size, and one which at first could not have been introduced without causing much pain, and which might have been harmful.

The second introduction of the pessary will be much less difficult than the first, and in the course of few days the operation may be performed with ease by the patient if she will closely study the mechanism of the parts, and the *modus operandi* under the head of "Directions for the use of the Spring-Stem Pessary."

Instrumental support, in cases of long standing prolapsus, will not be found to be all that is required; but strict attention must be given to the general health, as the digestion often becomes weakened, and the liver sympathises. The kidneys also frequently require attention, and everything should be done to give the system an opportunity to react, that the more relaxed parts may resume their former tone, and so by these means a cure may be effected.

After the removal of the instrument at night a cool injection into the vagina, by the means of vulcanized rubber or glass syringe, will aid in the recovery. If any tenderness or inflammation ensues from the early use of the pessary, an injection of slippery elm bark is very grateful and soothing. This, in the powder, may be mixed with warm water, half a teaspoonful of the elm to half a pint of water. Use this both night and morning until the irritation is relieved. When using the syringe always lie upon the back, and introduce it as deeply into the vagina as possible, then withdraw it far enough to permit the liquid to escape from the small openings, and expel the liquid into the vagina by pressing upon the rod.

For prolapsus, from its mildest forms, when the uterus is not displaced more than one and a half or two inches from its normal position, to procedentia, in which it protrudes from the vaginal orifice from three to six inches, the ordinary Spring-Stem Pessary will be the proper instrument.

The No. 4 cup is the most suitable for nearly all married women who have not had children, and when the womb is of the normal size. While No. 5 should be selected for women who

have had births, or if the organ is ulcerated, enlarged, or very tender, the vagina will permit its entrance with ease. And No. 6 is preferable in case of protrusion of the womb, with great relaxation of the vagina, and when there is danger of not retaining the organ in the smaller cups. In retroversion or retroflexion of the womb, the principal symptoms which would indicate the position without an examination would be incessant and unmitigated pain in the lower portion of the back, almost as severe when lying down as when sitting up, and a great tendency to constipation. These are the salient points noticeable by the patient, but if questioned, the other symptoms are found also well marked.

In anteversion or anteflexion, the bladder being constantly infringed upon, causes an unnatural inclination to urinate, even to the number of from twelve to twenty times in the twenty-four hours. This annoyance may disturb the patient both day and night, and is often mistaken for some form of kidney disease. The feelings of fulness and pressure above the pelvic bones are often remarked in the description of the case, but these are concomitant evils associated more or less with almost every case

of mal-position of the womb, as the peritoneum or membrane which separates the abdominal from the pelvic viscera is so intimately connected with the bladder, the uterus, and the rectum, that if the uterus is displaced from its normal position, it must more or less derange the relation one part has with another, and all must become functionally and organically implicated; and this effect will be produced to some extent, let the womb gravitate to whatever point in the pelvis the cause may direct.

When retroversion or retroflexion obtains, and there is no abnormal growth to interfere, the retroversion instrument, of consistent size, should be adjusted according to the directions given on the proper page.

If the womb is flexed to the front, the anteversion cup is the proper instrument to be used, as directed under the head of directions; but in either case a careful observance of the general health is very essential, with strict attention to the state of the liver and stomach, and caution against constipation. All the rules given in a preceeding chapter for constitutional health should be most rigidly complied with.

When the os, or mouth of the womb, protrudes from the vulva, this condition, as in *procedentia*,

when the body of the womb sinks below the outlet of the pelvis and becomes exposed to the atmosphere, even to the extent of several inches, when the soft, moist, mucous surface of the vagina is turned outwards and forms a covering for the protruding womb, and becomes a dry husky substance, less yielding than normal skin; and in proportion to the protrusion of the womb is the abdominal viscera disturbed, the intestines settle into the pelvis under the most aggravated conditions, even to the outlet as far as is possible; and when the organ has been replaced we have heard the gurgling of gases and liquids when they have been forced into the more natural position. Yet under such terrible conditions we have seen women struggling through their round of duties, and often wearing cheerful faces in their family circles and among their friends, with meritorious fortitude, like martyrs, as they certainly are to physical afflictions, which for years they had endured, and which they had hidden from the knowledge of their most intimate female friends, and often the husband was unaware of the truly deplorable condition of the wife he saw playing the part of the partner of his joys and cares. As in the case of a woman in

Manchester (England), who had thus suffered for eight years, and had not apprised her husband of the fact, until after we had lectured and had unconsciously touched so closely upon her case, and had declared a cure for it—then she made known her distress to him that he might help her financially to secure the remedy, which, we may state, he was only too happy to do, and remonstrated with her for having been so reticent during all the years of pain through which she had passed. But she, like hundreds of others, would rather suffer than subject herself to treatment by the opposite sex, so long as she could live without it. Then too, she told us that she had known of similar cases where treatment had not proved successful, so that she had but little confidence, and had kept her sufferings within her own knowledge until she sought relief at the hands of a woman, when her hopes were realized in the comfort of a restored body, and in increased ability to take her part in life's activities. Another instance of unbounded fortitude was a woman, 50 years of age, who had thus endured severe procedentia for twenty-eight years, and with bandages and compresses and canvas supports, after all ordinary pessaries had been unsuccessfully

tried, she suffered from the excoriations and inconveniences of the palliative treatment almost as much as from the protrusion of the womb, but in eleven months after the introduction of the No. 6 Spring-Stem Pessary she not only found relief but was cured of her infirmity, and walked, worked and rejoiced in the restoration of her health; and many similar cases might be cited.

In all cases of displacement there must be great caution observed not to stand or to walk about the room with the pessary removed, as every time the uterine ligaments are again put upon a strain the recovery is retarded, but with the use of the pessary during the day, and proper vaginal washes in the evening and the morning, the cure will doubtless be effected. These uterine ligaments and natural supports, in common with all the other tissues and structures of the body, are ever under reconstruction and repair; but these differing from muscular tissue, which must be left free for active use, these delicate parts must be freed from any strain or jar, that they may restore again.

It would be wise and beneficial for any-one who has commenced the proper course of

treatment for displacement of the womb—let the degree be great or otherwise—to rest from excessive exercises, and every day to lie upon the couch an hour to permit the organs to retreat and rest by elevating the hips a few inches by means of a pillow or folded shawl. This short time of rest will be most valuable, even if there is no pain or distress to demand such a luxury. The cure will be more rapid, and more strength is gained to complete the duties of the day.

CHAPTER XI.

UTERINE ULCERATION.

WHEN the mouth of the womb is tender, and sensitive to the touch, and when the surface of the os is rough as if covered with papilla, soft and relaxed, with a circumscribed edge, outside of which the surface is smooth and healthy (Fig. 10, 1). When there is also a daily discharge of a yellow color, increased before and after the menses, and accompanied by frequent pains in the back, and tenderness over the lower part of the abdomen, sometimes to the extent that the weight of the hands over this region becomes painful, and from necessity they are permitted to rest above it, or quite below, ulceration of the cervix or mouth of the womb may be suspected, and which may be correctly decided upon by a proper speculum examination. Pains are not infrequent on the inside of the thighs, or on the back of the thighs, reaching to the knee or

heel, and even to the ball of the great toe, which pains are at times mistaken for rheumatic symptoms, and are treated with local applications of liniments, or other embrocations; and one lady declared that she had gone so far as to poultice her foot with a view to

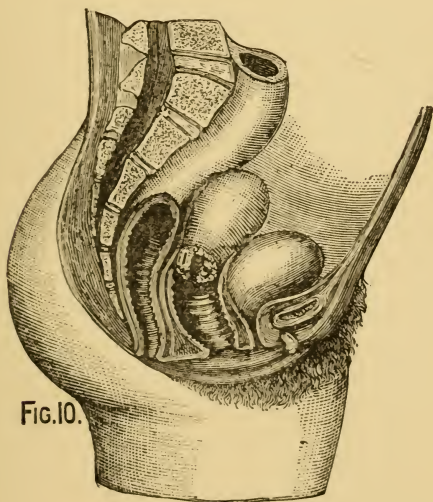


FIG. 10.

ULCERATION OF OS UTERI.

drawing the disease to the toe, where it might find an outlet in the form of an abscess; but upon examination it was found that the os uteri or mouth of the womb was badly ulcerated, and that these rheumatic symptoms were only

sympathetic pains which frequently attend upon uterine ulceration. Severe, and often spasmodic, pains at the stomach are not uncommon, and are sometimes mistaken for gastralgia, acute gastritis, gall stones, and other disorders equally erroneous, as has been proved when by the healing of the womb the pains in the stomach have been removed, even the worst forms of pain, as when accompanied by sickness and the vomiting of blood. In the enumeration of symptoms of uterine ulceration, these sympathetic disturbances are often overlooked by the medical adviser; even our medical authorities fail to sufficiently emphasize these indications of such a serious complaint; but the female practitioner, who comes in contact with thousands of the suffering among her own sex, has a much better chance to investigate the cause than physicians of the opposite sex, and she knows well their significance, as our own experience has proved to us.

Mrs. N., of Michigan, U.S.A., had suffered for three years from attacks of gastric pains, great irritability, and vomiting, each attack terminating in the vomiting of blood, after which the paroxysm abated. She had been under the treatment of several of the most eminent phy-

sicians to whom she had access, and when she called upon us, she related the fact that she had been treated for the various causes to which her symptoms had been attributed, such were gastritis, gastralgia, &c. We suggested a uterine examination, to which she freely consented, and we discovered an ulcer on the mouth of the womb, the size of a shilling piece; we paid but little attention to the gastric symptoms, except to temporarily allay the suffering, but we treated the local inflammation, and very soon the symptoms abated, and permanent health was restored. Many similar cases might be cited to substantiate the assertion that many of these serious stomach troubles, and cases of supposed heart disease, are but the sympathetic effects of uterine ulceration, or of other organic disease. If uterine ulceration is allowed to proceed, the lungs become implicated, first sympathetically, then organically, as will be recognised by pain in the breast, at first slight, and then more severe; a cough; deep, dark shadows under the eyes; pallor of skin, one cheek being often very pale, and the other periodically flushed, and gradually the vital forces weaken, the patient declines, dies, and the real cause of death may be never understood.

Our reason for making this assertion is because many patients come to us with these last symptoms, pointing unmistakably towards consumption, when, upon examination, the condition of the uterus has revealed long standing disease, either great congestion and ulceration, or displacement and ulceration, and in many cases a complication of all these is discovered. Under such circumstances nothing but temporary relief can be afforded the sufferer until the absolute cause has been removed, then all the symptoms yield to the treatment, and unless the case has progressed too far, a gradual but permanent recovery will take place.

Before entering upon the treatment of this interesting yet much to be dreaded complaint, it is very necessary to understand some of the most usual causes of the disease. To be able to ward off any cause of suffering is more important to healthy persons than to hear very much about the cure of diseases, and then again, where one is a subject of disease it is a very difficult task, and an impossible one to overcome a disease that is being daily, if not hourly encouraged in its development. In the treatment for any complaint, there must always be an earnest attempt to avoid the causes which

induce the troubles we hope to conquer, or the case will surely prove very unsuccessful. There is no one cause or reason for uterine ulceration for us to especially warn our sex against, but to the contrary, they are legion. Certainly the largest percentage of cases are found among married women, and particularly such as have had children in rapid succession, or where instrumental labor had been required; also after very short severe labors; again we find that too frequent sexual intercourse, as well as early coition after the birth of children, all of which causes should be earnestly considered; also undue exertion soon after the birth of a child may terminate in ulceration. As rational beings, all such excesses should be strenuously avoided. Women should know the evil results of such unphysiological acts, and husbands should do their part towards the preservation of the health of their wives. No husband can be happy and contented when he knows that his wife must suffer from what might have been avoided, and he also is liable to become diseased by coming in contact with morbid secretions, for by absorption he must receive the same elements in his blood that she suffers from. This is a delicate subject, but

one that needs to be duly considered when so much depends upon the proper course of habits. Great cleanliness should be observed on the part of husbands and wives, to remove all adhering secretions, after coition, by the free use of pure cool water. Neither should neglect this precaution. If there is any constitutional or local affection on the part of either, the disease may be communicated. A scrofulous condition of the system will render the organs more susceptible to disease if irritated in a forcible manner or too frequently. Then again, the secretions thrown upon the absorbing surface of the vagina and os uteri from a diseased husband may infect the wife, unless much care is observed to use water freely. Self-protection against disease is justifiable and laudable in every person.

In the case of the unmarried, cold, over-exertion, suppression of the menses, long walks, falls, and continued displacement of the uterus for many months or years may result, and often does, in ulceration of the os uteri. Let the cause be what it may, it should be understood and rigorously avoided. Tight lacing, and the use of long, stiff steels in corsets are sufficient causes for this trouble; continued hours of

dancing, alternately heating and chilling the system, would cause a congestion of some of the internal organs, and if the uterus is the most susceptible in a given case then ulceration would be quite sure to follow.

Treatment for ulceration must greatly depend upon the symptoms; the general system must not be neglected, and attention to all the emunctories is an absolute necessity, for the absorbents are continually gathering up the morbid elements associated with the local inflammation, and through the means of the circulation they are being distributed to all all parts of the body, to be again returned to the seat of local difficulty; to obviate which, all of the blood-cleansing organs, such as the liver, the kidneys, the small glands, and the skin, should be encouraged to greater activity; and at the same time the digestion should be improved and good nourishing food be provided, whereby the tissues may be restored to a healthy condition.

If there is constipation, it must be overcome by proper aperients, such as will accomplish the twofold work of relieving the portal system, by stimulating the liver and unloading the bowels by some gentle aperient medicine, such

as senna, rhubarb, or magnesia, when the urine is dark or cloudy.

The following prescription will be found valuable :

R. Citrate Potassa	. . .	4 drachms.
Aqua Pura	. . .	8 ounces.
Mix.		

Sig.—Dose, 1 teaspoonful three times a day, four hours between each dose.

Strict attention must also be given to the cleanliness of the skin, for which we should recommend an alkaline sponge bath twice a week, in either a solution of carbonate of soda, or of carbonate of ammonia—one teaspoonful to four quarts of tepid water, or in that proportion. Local applications to the os uteri should be instituted three times a week by the means of soft balls of cotton wadding, with medication to suit the case.

If there is sufficient displacement of the womb to necessitate the use of the stem supporter, the wash for the vagina must be resorted to before its introduction and after its removal.

When the womb is prolapsed, anteverted, retroverted, or retroflexed, as a complication of ulceration, the cure for this last symptom is much more rapidly effected by the use of an

appropriate instrument, which is most valuable, as the healing process can progress much more satisfactorily when the weight is removed, and the congested blood vessels unloaded, then the adjacent parts, as well as the abdominal viscera, are more naturally situated and maintained when in the erect position, on the principle of carrying the hand in a sling when suffering from a felon or other inflammation. Not only is there an increase of comfort from the use of the instrument, but it serves as an actual aid to recovery; and almost all patients are enabled to express immediate improvement after its adjustment. It must of course be removed every night, and adjusted before rising in the morning, after the local washes have been applied. In the use of any and all vaginal washes, they must be injected when lying on the back, and should be retained for ten minutes before arising in the morning, and indefinitely at night. The glass, or hard rubber female syringe, of the capacity of an ounce and a half, twice filled, will be the most desirable one to use, the same as should be resorted to in the treatment of leucorrhœa.

CHAPTER XII.

UTERINE AND ABDOMINAL TUMORS.

THERE are many degrees of inflammatory action involving the uterus and its appendages. The organ may be greatly enlarged and made heavy by the overloaded vessels, and by more or less effusion of water, from a long continued displacement, from cold, frequent over-exertion, mental excitement, or what is far more common, from speedy or badly conducted births, as well as from too early rising after confinement, and want of proper care. In some instances, neither the husband nor interested friends are aware of the necessity for almost entire rest upon this important occasion. The fact of maternity being considered as a natural function leaves the mind clear of any special anxiety, and as soon as a woman positively can, she often arises and resumes her usual avocation of superintending her domestic affairs, or enters into society, which exertion is more than she is

able to endure; and nurses are sometimes ambitious to see their patients upon their feet, for two reasons perhaps, first as an evidence of their superior skill in the department of having their lady assume the appearance of health and strength at such an early date after her confinement, and secondly to lessen their own cares and toils to some extent, by the lady waiting upon herself and child, through the understanding that "after nine days a woman is quite able to sit erect or walk," which pernicious custom ought to be discontinued and discarded as a mischievous liberty no nurse should assume. But on the contrary, she should encourage the invalid to be patient, and wait until nature can restore the organs and parts to their normal conditions, and to this end her advice and assistance should be directed most strenuously.

All these variations from the standard of health upon which we have touched, need a mild but judicious course of treatment to favor a rapid improvement, the details of which may be gathered from a close perusal of the pages in this book, where prescriptions will be found, and much may be gleaned to aid the reader if she is suffering from any of the diseases herein

referred to, and any of their complications may be recognised by a comparison with the symptoms given.

In a more elaborate work, we might take into consideration the various kinds of tumors, polypi, cancers, and malignant diseases, also diseases of a venereal character; but with the exception of the last, not much could be done for either; hence we shall but briefly touch upon internal tumors and cancers. However, a few remarks may relieve the enquiring mind, and afford encouragement where doubts and serious apprehensions are pending.

The name of tumor is almost always associated in the minds of patients with an abnormal growth which implies serious, if not fatal, results; but the term is often misapplied to other circumstances, such as with reference to the foetal development, and the consequent enlargement of the womb; this, however, is not an abnormal or diseased condition. Also an incorrect diagnosis of prolapsus of the womb, or an enlargement of the organ from congestion, have received the misnomer of tumor, and patients have been greatly terrified by the name given to their complaint by the physician, when in reality no tumor existed, and there

was no cause for any serious apprehension. Many such cases have come under our notice, where almost the first expression of the patient was, "I have a tumor," and upon enquiry we have found that such a diagnosis had been thus pronounced; but, after a thorough examination, no vestige of a tumor has been discovered, only the natural organs of the body were displaced, and consequently of an abnormal size. In one case, a lady had spent three months at a water-cure establishment, and finding that she must remain long beyond the time her husband's means would warrant, she was obliged to leave; and when she called upon us, it was with the full expectation that we would agree that she was laboring under the same encumbrance as had been pronounced by the examining physician of the water-cure. But a very different condition was discovered, for instead of a tumor which required a surgical operation or many months' treatment for "absorption," she was suffering from prolapsus of the womb, and she soon obtained permanent relief from the use of the Spring-Stem Pessary, combined with constitutional treatment.

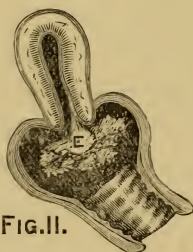
Another case was that of a lady, forty-seven years old, strong, and in every way blessed

with good health, except in one existing trouble, which by her physician had been pronounced a tumor, and which he advised her to have removed in two weeks from the time we saw her. He had informed her that it was a serious operation, and that she might not recover, so she had made her will, and had informed her family of the physician's intention. But as we were giving a course of lectures in the town where she resided, and hearing the subject of tumors discussed, she called upon us to ask an opinion, and after an examination it was pleasure to inform her that instead of a morbid growth, the supposed tumour proved to be the womb prolapsed to the extent of procedentia, the organ protruding fully four inches from the vulva. In this instance both surgeon and patient were spared, as they might be in many cases, a painful and dangerous operation by any cutting instrument which would jeopardize life; and by means of the Spring-Stem Pessary the organ was restored to its natural position, and there retained until the recuperative powers of nature accomplished the cure. The gratitude expressed by patients for such a ready cure is far more satisfactory to a physician's mind than the meagre sum of money that the treatment of the

case would yield. These incidents are not infrequent, and they reflect much discredit upon the judgment or knowledge of the medical advisers who would subject their patients to the dangerous operation of extirpation of the womb; indeed, many of the popular surgical operations which have been, and are being performed by physicians and surgeons, are unjustifiable, and should be condemned by the more thoughtful and conscientious class. Such operations are ovariectomy, and occlusion of the vagina for the removal of symptoms due entirely to displacement of the womb; and the majority of such operations are productive of more mischief than the disease itself if left undisturbed by any treatment.

Polipi are species of tumours which are connected with an organ, and are attached to it by means of a stem or neck. They vary in size, some are not larger than a common garden pea, while others weigh from four to sixteen ounces (Fig. 11 E). These develop in the uterus as far up as the superior border of the cavity, or in the cervix or neck, or on the lip of the womb. They are of different density, some being like flesh to the sense of touch, others more soft and and patulous, and filled with a gelatinous, semi-liquid mass, or with blood.

When blood is enclosed in the membranous sac, it may be discharged at times by some slight cause which induces a rupture, or a partial removal may occur, and the result may be a copious hæmorrhage which may prove fatal. If, however, their removal can be effected the case usually recovers, and may never be again attacked. As such abnormal conditions cannot be avoided or remedied by the patient, it would



POLYPUS.

be useless to dwell at any length upon them. It would be best for those suffering from them to consult a medical adviser, and he or she must decide the course of treatment.

Ovarian tumors manifest themselves at any time in a woman's life, from twenty-five to sixty years of age, but the most usual period for their appearance is about the close of the

menstruation, at the age of from forty-two to fifty. The tumor may have been developing for several months, if not for years, before its existence is discovered, and it may have become as large as a fair-sized orange, and may be distinctly felt in the right or left side of the abdomen, just in front of the ilium. And even after discovery the treatment is often deferred on account of a delicacy of feeling about consulting a physician, or from prejudice against the recognition of such a growth, until too late for anything to be done to arrest the development, and it gradually progresses in size, and fills the pelvic cavity, or even rises above the brim of the pelvis, and may fill the abdomen until the form is as greatly enlarged as that of a woman far advanced in pregnancy, and even to a greater degree. Under such circumstances, but little can be suggested by the physicians in the way of any means for permanent relief, and the surgeon's operation for removal will be the last resort; an operation much dreaded by every subject, and justly too, for there is much at stake, although, through the beneficent means of anæsthetics, it may be both painless and successful. But it is an operation which no surgeon can encourage the patient to accept, as

it is always one of peril; though life has often been prolonged, and family relations maintained when the venture has been made. If the patient is in the possession of ordinary health and strength she may recover, and may afterwards enjoy good health; but if she is feeble, and deficient in vital power, she is liable either to sink under the operation, or in a few days after it.

If the general health is maintained, the tumor proceeds without much pain or inconvenience; and it is not until the last stages are reached that absolute distress and inconvenience are experienced. The tumor is often a solid, suet-like mass, enclosed in a sac which is partly filled with water, and this sac may be encased in another, and so on, each containing a fluid, until from three to seven gallons may accumulate, which if not drawn off, would soon cause death; but by the repeated operation of tapping, the comfort of the patient may be maintained, and life prolonged for months or for years.

It is not considered by the medical profession that much, if anything, can be accomplished towards diminishing ovarian sacculated tumors by the means of medicines; yet,

during the early stages, it would be rational to endeavour to arrest their growth if possible, by stimulating the emunctories, such as the liver, the kidneys, and the skin, to greater activity, and thereby to aid Nature in expelling morbid elements from the system ; and, by gentle pressure over the region of the tumor, something might be done to suppress its development, if not to remove it altogether. This would be an achievement worthy of the effort, and which might prolong life, and render it more endurable. For the result desired, we would advise the following course of treatment to secure a daily evacuation of alvine secretions, and an increased action of the liver and other secretory organs, in accordance with the necessities of the case. And for pressure, an abdominal bandage, such as accompanies the Spring-Stem Pessary.

For the benefit of any one suffering from ovarian tumor, when the surgeon refuses to operate, or the patient is unwilling to submit, we will detail a case which came under our notice in Oregon, America. A woman, fifty-seven years old, feeble, pale, emaciated, and remarkable for the size of her abdomen ; her physician had given her up as beyond the reach of remedies, and the surgeon had refused to

operate, as the case was one of imminent danger. The husband asked permission to try a remedy, and all agreed that his prescription was at least harmless, and, probably, equally inefficient. The wife was placed under the influence of hot clay poultices, prepared by the husband from red clay, such as is used for making bricks; the coarse parts were sifted out, and the fine dust was mixed with hot water to a consistency of thick batter, spread on a large cloth, and applied over the entire surface of the abdomen. They were closely bound, by keeping her on her back most of the time for six months; and the effect was to relieve her of all appearance of a tumor; and when the husband brought her to call upon us, she was as natural in appearance as any woman, and was happy to come and narrate her case, as one which had found relief from a homely source, and applied, not by a professional man, but by a devoted husband, who was most anxious to restore her.

We have no theory to offer in this case, but report it as it came to us. These clay poultices were retained until quite dry, then removed for fresh ones to be applied, and each poultice was pressed and confined very closely to her form. Any one would be justified in trying the same

remedy rather than wait for death to bring relief. No one should be so stolid in her prejudice against, or faithless in a non-professional remedy, as to object to try to preserve life if there is any chance whatever ; for while there is life there may be some means by which it can at least be lengthened, even if the means resorted to are outside the routine of professional advice.

Uterine tumors, of a solid or fibrous character, need not be here discussed ; they are beyond the aid of home treatment, and often baffle the skill of the most wise and learned in the profession.

Cancers and malignant diseases of the uterus are equally unmanageable ; therefore they need not claim much of our space for their description, nor for a course of treatment which cannot be more than palliative.

Cancers, wherever located, are always formidable, and particularly so when they are in or about the uterus, and they are not often recognized as such until they are greatly advanced, and give rise to suspicions by the peculiar symptoms characteristic of the disease, after more or less of general uneasiness has been experienced, with feelings of internal pressure, enlargement of the abdomen, or a feeling of

weight in the vagina ; and muddy colored discharges with fetid odour, and occasional hæmorrhages, which at times may be scanty, but at others, quite profuse, even to an alarming degree. Also flatulency, indigestion, and a peculiar complexion, ashy dark, or dingy sallow ; with a gradual wasting of flesh, until in the course of from eighteen months to two years the case ends in death, either by copious hæmorrhage, or by a gradual decline of all the vital forces.

But little can be done, except to alleviate the distress, to ease the frequent pains by narcotics, to keep the bowels open, and to administer such nutritious food as the stomach can accept. Great cleanliness should be strictly observed, and disinfectants should be constantly used to protect both patient and attendants from the inhalation of the poisonous effluvia which must necessarily emanate.

Injections of chloride of lime, bromo chloral, or carbolic acid largely diluted, would render the conditions more endurable. Also pledgets of cotton wadding, wet with equal parts of glycerine and water, and a few drops of carbolic acid, or a drachm of Condyl's fluid, are comforting applications to the os uteri, if the discharges are offensive and troublesome.

Good nursing and patient care are more valuable in these cases than much medicine, as the termination will be fatal, and medical advice can avail but little except to conduct the case to as comfortable a conclusion as circumstances will allow. More than this need not be hoped for when the disease is understood to be of the nature herein described; and money can be spent to better advantage in supplying the unfortunate patient with comforts, and little luxuries in the way of food, and grateful, nourishing draughts.

CHAPTER XIII.

HERNIA, OR RUPTURES.

HERNIA, or rupture, comes more properly under the head of surgery than of medicine, and is known as a lesion rather than as a disease ; it is met with among all classes of society, in both sexes, and at any age.

Hernia is recognized as a local swelling, on or near to the abdomen, and varying from the size of a garden pea, to that of the head of an infant. These lesions occur at points or borders of the abdomen where there are natural openings, or where its walls are thin, so that the fibres yield to any undue pressure, and sometimes give way ; and the omentum, or covering of the intestines, or some part of the intestines, protrudes through the opening or separated fibres, and forms a soft, pulpy mass underneath the skin, which usually returns to its normal place when the patient is lying upon the back ; but upon arising, or after some light

exercise, the soft tumor reappears. The size of this tumor depends upon the length or breadth of the opening, and upon the locality. The hernia, or rupture, is named from its locality, if it is at the umbilicus or navel, it is named the umbilical hernia; if on the groin, it is known as the femoral or inguinal hernia, according to its exact position, and this must be determined by a proper examination before treatment is decided upon.

There may be a complication of hernia, or one on each side of the abdomen, about the brim of the pelvis. In the male, the soft mass may pass down into the scrotum, while in the female the labia may become greatly enlarged by this intrusion.

Hernia may be sometimes discovered at birth, caused by some undue pressure; or soon after birth, from the straining efforts of the child, in attacks of hard crying, sneezing, or coughing. While, in older children, and in adults, they may be caused by lifting, jumping, coughing, reaching unreasonably, or by any extra pressure whereby the abdominal muscles are forcibly contracted, and so pushing the organs against these weak points that they yield. At first the case may be almost imperceptible, but gradually

it will enlarge as the cause is repeated or continued. The rupture may, from its first appearance, be accompanied by pain, and this may increase from time to time; or as the opening increases, the pain may become less severe.

The danger of hernia is not in proportion to the size of the tumor, but rather in that of the difficulty of its reduction, for if but a small portion of the intestine becomes strangulated and cannot be reduced, gangrene and death are very liable to follow in rapid succession, hence the importance of immediate attention when it is discovered; and the most judicious course for the patient to adopt is to be well-fitted by a surgeon, physician, or instrument dealer, with a proper truss, and this should be most cautiously applied lest the reduction of the intestine be not complete, for then the pressure of the truss would be the source of much pain, and the result might be most unfavorable.

Small children need the same prompt treatment as the adult; trusses should be changed as age and size require, and must be worn until there are no further indications of need for their use.

In largely developed umbilical hernia, a truss may be of little value, and a thick, well-fitted

canvas belt will afford more comfort and be of more use, for such cases are past all hope of absolute cure. I have found the illustrated abdominal bandage which accompanies the Spring-Stem Pessary to be the best fitting and most comfortable support under such unfavorable circumstances. Sometimes, in cases of incurable umbilical hernia, local applications of cold water compresses are grateful and beneficial; or when the tumor does not recede, and strangulation is threatened, the application of warm fomentations or poultices of tobacco will relax the parts, and will facilitate the return of the sacculated part to the abdomen. This must generally be effected by gentle manipulations, and by slight pressure in the right direction; then, with a gurgling sound, the protruding mass will be felt to yield, and immediate relief secured. After the reduction, straps of adhesive plaster may be beneficially applied to aid the bandage in its support.

Bathing the parts with cold salt and water, while the patient lies upon the back, is grateful and soothing, and at the same time serves to give tone to the structures; so is advisable on that account. Also it is well to keep the evacuations softened, to avoid constipation, and to

attend to the general health ; for here, as in all other afflictions, one part strongly sympathizes with another ; so all should be in healthful harmony to warrant the hope for recovery of even a local difficulty.

CHAPTER XIV.

DISEASES OF THE RECTUM.

PROLAPSUS ani, or falling of the bowel through the anus, is an occurrence which sometimes attends a weak, relaxed condition of the system, and particularly of the intestinal canal; and it frequently accompanies dentition, or is the sequence of diarrhœa in children or adults, and consists of a protrusion of the lower bowel through the sphincter ani muscle which surrounds the anus, and is usually under the control of will; but in a feeble state of the system this power is greatly diminished, and the result is as described.

These cases might prove serious if the bowel were permitted to remain protruding, as congestion of the part would render the mass more enlarged, the blood vessels would become tinged with blood, and the surface purple; and, if not speedily returned, it might result in gangrene and death. To obviate this, there might be no

time to secure medical assistance, and every moment increases the trouble, as the veins become more distended and the difficulties increased. Whether the subject be a child or an adult, the recumbent position should at once be assumed, with the hips elevated by a folded quilt or pillow ; then with a soft cloth, covered with a lubricating substance, such as olive or castor oil, or butter, if more convenient, press upon the protruding mass with a gentle, kneading motion of the fingers ; at the same time, with the left thumb and finger, endeavour to spread the parts open to facilitate the ingress of the exposed intestine, after the reduction of which, hold the fingers firmly to the parts to give opportunity for the bowel to recede ; and it is usually retained until subsequent evacuations ; but here the imperative and immediate duty of the attendant ends, and now the general health must be restored by overcoming the diarrhœa, and by giving tone to the system by rest, proper nutritious food, and perhaps a gentle tonic.

Hemorrhoids, or piles, is a more frequent disease than the one just described. This consists of swollen hemorrhoid veins located in the rectum, from which the name of the disease is

derived. The congested vessels may be entirely within the rectum, under which circumstances the complaint is known by the name of internal hemorrhoids, or blind piles. When they protrude to the surface, it is known as external piles. The last-named form of the disease is very often the more painful, while the internal form is often fraught with more danger, consequent upon hæmorrhage, and as an obstruction to defæcation. Either condition causes a great amount of distress, both local and constitutional, if internal, then with pain in the extreme lower portion of the back, a sense of fulness, with a disposition to defæcate, but without the ability to relieve the desire ; the swollen veins induce a false demand, which, if attempted to remove by special effort, is followed by more inconvenience. Headache, nausea, and nervousness all conspire to increase the general distress, and hæmorrhage, in quantity from a drachm to a gill, or even to half a pint, induces great prostration. And if external, the swollen veins often become very troublesome ; they itch, burn, and sometimes discharge pus ; they may at first be small, but increase in number and size until to sit or walk becomes almost or quite impossible.

Many of the causes of this disease could be

avoided; and persons in health should make an effort to maintain that blessing, for when once it is lost it is not always easy to be reclaimed; and it is to enable the reader of this book to pursue an even rational way that we now touch upon this trouble, which, although outside the sexual system, is of a character most delicate; and doubtless many have suffered for years from this complaint without ever, from the first, having known the cause, and perhaps through a want of this knowledge have been daily increasing what had already become almost unendurable; but from the delicacy of the subject it was never mentioned to a medical man.

Women who have given birth to children are the most subject to this disease, from the pressure of the head or body of the child previous to or during the birth, a circumstance which is almost unavoidable. There are many circumstances which might bring about piles.

Shop girls who stand many hours every day, and do much reaching in taking down boxes from high shelves, or in replacing them, are liable to the disease; also those who wear heavy clothing hanging from the hips and bearing upon the back and abdomen, as is the general

custom at present; but all this weight should be suspended from the shoulders by the means of braces or straps, or waists with buttons and button-holes alternately, upon which the under skirts and dress skirts can be attached. Women seem to be particularly ignorant in regard to how their garments should be properly supported, but if any mother for a moment reflects upon the arrangement of her little daughter's clothing at about the age of five or six years, she can readily understand that the same rules may be followed at any subsequent age.

Corsets or stays are supposed to support the clothing, but these articles are seldom held from the shoulders, and when they are not, the abdomen and back have the extra burden of them; and if they are not so tightly drawn as to deform the body, the steels and bones compress the abdomen, and crowd upon the intestines to such a degree as to impede circulation, and from this hemorrhoids may appear. A neatly fitting, but loose waist would be a much more physiological article of dress than the corset, and might, if properly made, supplant it altogether; then, with shoulder-straps to this, and with the skirts suspended, much would be accomplished towards the im-

provement of the health of the female sex. When the corset is worn tightly, the evil is increased tenfold, and it should never be attempted. Constipation is another fruitful cause of hemorrhoids, and this frequently arises from improper food. White bread, fine flour biscuits, toast, rice, cheese, strong coffee and tea are all constipating, and should be supplanted by coarse wheat meal bread, oatmeal and wheat meal porridge, fruits and vegetables; and if tea and coffee are indulged in, they should be of weak infusion; hot water, either clear or seasoned with sugar and milk, would be much more healthful as a table drink; and just before retiring to sip half a pint of hot water is very efficacious in overcoming constipation.

When the liver is torpid and the secretion of bile is deficient, constipation will be the result, to be alternated in some cases by diarrhœa. A mild course of medical treatment by the means of vegetable aperients will aid in the removal of biliary secretions, and will prepare the system to carry on its normal functions after the cessation of their use. Regularity of alvine evacuations should be highly regarded, and the habit should be established in this respect as punctually as in taking food; persons should observe

a certain hour, as nearly as possible, and then not permit trivial circumstances to interfere; one's health is of more importance than the social call of a neighbor, or the domestic duties which may seem to be imperative. These minor obstacles may come between a woman and her duty to herself; but once neglecting Nature's urgent call, may so derange the system as to thwart her operations for a month, and thereby cause much suffering, ending at length in piles.

When the fæces approach the rectum, the more sensitive portion of the bowel, and thereby demand attention, if not expelled, they will recede to a more distant portion of the intestine, and may there remain for hours, or even for days, during which time the moisture from the effete mass is reabsorbed into the system, vitiating the blood, causing a fœtid breath and offensive perspiration, and laying the foundation of hemorrhoids by the density of the substance and the great difficulty that attends its expulsion; all of which might have been prevented, and should have been, for the sake of others as well as to avoid personal suffering, as we have no right to make ourselves repulsive to our friends and associates by any neglect of the laws which govern our physiological functions.

In the treatment of this disease, as in most others, when the cause is removed the cure commences, for Nature is ever watchful, and ever ready, while there is vitality to kindly let her act her part in the restoration of all the diseased organs and tissues, and with opportunity granted, the healing work goes on; but when it lies in our power to aid Nature by removing some of the obstacles, or in other ways to assist her healing, restorative powers, it is wise to do so.

In the case of piles, the indications would be to keep the fæces dissolved, and to let the evacuations be free, to remove all unnecessary pressure from the affected parts, such as was suggested to unload the hepatic vessels, and thereby encourage the more free secretion of bile, which is of itself an aperient, through its stimulating effect upon the lining membrane of the intestines. Enemas may occasionally be resorted to, if the fæces become impeded, but the daily use of the enema as an evacuant is objectionable, as the liquid injected brings with it the natural mucus which the glands of the bowels secrete for lubrication, in order to facilitate the normal evacuations, and if the fluid injected interferes with this, the sub-

stance must be retarded in its passage, and the effort for its expulsion must be increased, consequently enemas, although frequently advised, are not free from objections, and should be avoided as a customary mode of evacuating the the bowels. But they are most valuable as a means of conveying emollient substances to the abraded surfaces, such as the mucilages of slippery elm, linseed, boiled starch, either of which will be found very soothing and beneficial, and may be introduced gently and in moderation, but not in quantity to evacuate for one application; four ounces, or a small tea-cupful will be sufficient, and the frequency of use will depend upon the degree of suffering, but from once to three times a day should be sufficient, and with either of these demulcent preparations a tablespoonful of linseed or of pure olive oil may be mixed to advantage. If the soreness is external, poultices of the same materials may be applied, also local applications of linseed oil, or an ointment of oxide of zinc, will be soothing to the parts, this may be repeated once or twice a day.

Complete cleanliness of the parts must always be maintained; occasional sitz baths of tepid water, and rest from the erect position will be

beneficial, and over-exertion must be avoided. The observance of these rules, with proper nutritious food taken in moderate quantities, with a night and morning draught of hot water taken slowly, will usually overcome the difficulty, unless the case is complicated with uterine displacement, which we find to be a very common occurrence. Then the womb must be reduced to its normal position by the means of the appropriate spring-stem support which has been frequently referred to in preceding chapters, and particularly explained in that on the treatment of "Uterine Displacements." Often we have found all the symptoms speedily relieved by the use of the support, and when this complication does exist all other treatment will fail, except as a palliative, until the obstruction is removed and the pressure relieved, whereby the blood can circulate more freely and the curative process become rapid. Surgical operations are sometimes required to remove obstinate protrusions that perhaps never would contract nor return, and are very troublesome, but much caution should be observed in regard to such operations, as much harm may result from subsequent stricture of the anus.

CHAPTER XV.

THE URINARY SYSTEM IN HEALTH AND DISEASE.

OF the many parts which compose the human organization none are more susceptible of derangement, or the source of greater pain and distress, than the organs constituting the urinary system, which include the kidneys, the ureters, and the urinary cyst or bladder.

The kidneys, which are two in number, are located on each side of the spinal column, and near to the waist. They perform the important office of relieving the blood of the effete, worn down structures consequent upon the normal action of the various organs of which the body is composed. The secretion of solids and liquids, if retained in the circulation to be carried back to the structures from whence it was derived, including the brain, spinal cord, and nerves, or to the muscles and their tendons, and the ligaments which unite the bones, would give rise to most serious results.

The composing elements of the urine, under their present transformation, could be of no more use to these several parts than the ashes in the grate would be to the rekindling of the fuel ; but on the contrary their accumulation in the system would serve to retard the circulation of the blood, to poison the fine, delicate tissues of the nervous system, and to destroy the flexibility of the muscular fibres, disqualifying them for performing their functions with their accustomed ease, by accumulating about the joints, causing them to increase in size through a deposit which renders them exceedingly painful and stiff. This condition is known as rheumatism or gout, and from the earliest symptoms is sufficient to arouse apprehensions of danger and merited alarm from the unusual increase of suffering, and the rapid progress of disability which ensues.

Great care should be taken to maintain the regularity of this renal secretion, which is liable to become arrested by various causes, such as cold from the sudden suppression of perspiration, by sitting or sleeping in damp apartments ; the wearing of wet boots or shoes ; the removal of flannel underclothing at an unsuitable season ; or from dietary improprieties, such as the consumption of swines' flesh, which is often infected

with diseased elements of a tubercular character, or with the ever to be dreaded trichina; from the use of strong coffee and tea, both of which are detrimental to all the secretory organs, first by their early or stimulating effect upon the nerves, which they excite, and then by their narcotic or depressing influence, as well as by their decidedly astringent properties, which if taken into the system daily for years, or only for months, must necessarily have an unhealthy effect.

The indulgence in ardent spirits and the less intoxicating drinks, such as ale and stout, will leave a baneful effect upon the urinary system. All such beverages urge the kidneys to a greater necessity for elimination, according to the volume consumed; they at the same time carry into the system gross elements which must clog and dam up the fine glandular structures of these organs, which necessitates on their part a much greater effort to perform their function, and such a condition cannot be tolerated with impunity and without the consequent effect. The organs become overworked, and at length fail to be able to meet all emergencies, so that they must succumb early or late to some form of disease; either they become paralysed from

exhaustion, or congested and swollen, and terminate in inflammation and suppuration, or are perhaps attacked by that terribly destructive complaint known as "Bright's disease," when the structure of the organs at length gives way, as albuminous discharges will evince, until their normal function must cease, and the general system yield to the ruinous influence of disease which, if not duly arrested, must terminate in death. And yet, perhaps through ignorance of the effect of such physical violations, or from a want of moral courage to resist temptation, poor victims pursue the same course for months, or for years, according as the natural strength of their organisation permits, and they still ask, "Why are my kidneys thus affected?" "Why these pains in head and limbs?" "Why all these great disturbances?" And these afflictions are by some regarded as the special dispensation of Providence for some wise end; while by the less superstitious class they are discerned to be the effects of violated physical laws which are as sure to follow the cause as the night is sure to follow the day, or as the proper admixture of certain gases is to form the atmosphere which we inhale.

The ureters are two small tubes which con-

vey the urine from the kidneys to the cyst or bladder, which is located just at the back of the pubic bones. The bladder is composed of elastic tissue, is supplied with muscular fibres, and has a natural capacity of receiving about a pint of fluid, which quantity, or even less, usually urges to its removal, and this function is demanded about every four or five hours throughout the day, and perhaps once during the night; but under emergencies, or from neglect of the natural demand for evacuation, the bladder, through its great distensibility, may be forced to hold as much as from a quart to three pints of urine; this, however, is far too great a strain upon the tissues for the continuance of their health.

The urine in its normal condition consists of earthy compounds, such as urates, lithates, and phosphates, held in solution; and its passage from the source of its formation, the kidneys, to that of its final expulsion should be accomplished almost without recognition further than as the mind has control over the muscular fibres about the meatus urinares, or mouth of the bladder, which under circumstances of disease may give rise to great inconvenience, and often to excruciating pain, as when the urine, which

should be a clear, transparent, slightly yellow or straw-colored, unirritating fluid, becomes freighted with morbid elements contingent upon the derangement of the kidneys, such as insoluble compounds which, although at first may cause symptoms characterised only by a slight appearance of sandy deposit, accompanied by a sense of irritation and heat, may eventually terminate in the expulsion of small particles of calculi, or in concrete masses of one or other of the earthy materials, ranging in size from a small pea to the dimensions of half a hen's egg, known as gravel, or "stone in the bladder." As of whatever appreciable size these masses may be, there will be pain in the transit through the ureters, which will then be felt from between the top of the hip to the groin, and may continue for from one to three hours, according to the size and shape of the gravel or stone; and when the calculus is lodged in the neck of the bladder, the pain, which is often of a most excruciating character, indicates its presence at perhaps every attempt to urinate, and this demand is, under such circumstances, more frequent and urgent than in a condition of health.

The pains in the side of the abdomen, or at

the urethra, or neck of the bladder, may be greatly relieved by the means of hot fomentations, or very warm sitz baths, and, at the same time, by copious draughts of hot water, the relaxing effects of which will facilitate the passage of the partially lodged calculus, or small stone, and the moment an escape is effected the pain will cease, and a collapse or prostration may follow. When the sitz bath or local hot applications fail to afford relief, a general sweat may be tried, with the free use of warm infusions of spearmint, pennyroyal, or of parsley root, or even clear hot water, any of which, when freely drank, will wash the kidneys through the amount of liquid taken, and, by the mechanical pressure upon the hard deposit, will to a great degree force its removal. But when the large mass forms in the bladder, and rolls to the inner mouth and prohibits the flow of urine, the services of a surgeon will be required to perform the operation of lithotomy, which may, if skilfully executed, give immediate and permanent relief; but this operation is attended by its dangers, and, like all other consequences of diseased conditions, had better be avoided through a carefully conducted life to ward off any such necessity. Disease in almost

every form is more easily prevented than removed, and this is why we should under all circumstances consider well, and adopt the wise plan of taking the precautions which will prevent ill health instead of recklessly violating the laws upon which life depends.

Among the numerous morbid conditions to which this organ is subject, congestion and inflammation or catarrh are not infrequent, and either may be contracted through any of the ordinary neglects or inconsistencies to which we subject ourselves, whereby colds result. The most sensitive organs will usually be attacked under such circumstances, and if in certain cases this should be the urinary cyst, it is here that the disease will locate itself. The too frequent habit of sitting upon cold, uncovered wood seats at church, in public halls, or in the open parks, with the feet resting upon the cold granite slabs, or damp chilling earth, is a fruitful source of cystic derangement, as are also many other ways equally indiscreet, notably amongst them being the neglect to yield to the natural requirements of the system, and this is practised by those of all ages ; and under such circumstances the urinary secretion is often retained until the bladder becomes irritated

from what otherwise might, if voided at the proper time, have been healthy and bland to the lining membrane of the cyst, and to the canals conducting the urine to and from the organ; but from prolonged retention it becomes foetid and partially decomposed, causes inflammation and consequent pain, either at the time of voiding or immediately afterwards, and there will be a painful sense of collapse, or as of the coming together of the inner walls of the bladder, which sensation often proves more distressing and more hard to endure than actual pain.

In case of inflammation of the bladder or of the urethra, warm, tepid, or cool compresses may be applied, as the feelings of the patient suggest. Tepid, or warm sitz baths may be taken, from ten to fifteen minutes' duration, and the surface of the body should be protected from the air during the operation. The free use of demulcent draughts, such as the mucilage of linseed or of slippery elm, or an infusion of sweet elder blossoms, or pure hot water taken in half-pint quantities, night and morning, will have a cleansing effect, and be beneficial either in health or disease, and will very often excite the stomach to expel the morbid secretions and partially digested food, will facilitate

the movement of the bowels, and cleanse the kidneys and passages mechanically. The poisonous effect of stagnant urine is liable to derange the otherwise healthy organs, so that micturition becomes unnaturally frequent as well as painful, and for months will be the cause of suffering. Or by the natural distension of the bladder from retained and constantly accumulating urine, the organ loses its tone and power of contraction, and the subject must suffer, either from obstinate involuntary retention, or perhaps becomes a victim to incontinence of urine, and both by day and night is annoyed by involuntary discharges; when a slight jar of the body, or to sneeze, laugh, or to cough, will force the urine to flow, and this, if not painful, becomes a matter of much inconvenience and dread, for, under the most embarrassing circumstances, this misfortune is liable to occur, and, with the great necessity in some cases to void urine every half hour, and under any little excitement, even more frequently, is very exhausting to the nerves, and renders life almost unwelcome. To some omission of duty to self, many can date the commencement of urinary ailments; therefore no rational being should permit pleasure, society, or any circum-

stances to become obstacles to the preservation of health, when all happiness, joy, and pleasure so greatly depend upon the possession of this ever to be desired earthly boon.

This trouble sometimes commences in very young children; with them attention should be directed to the natural demand, for when they are busily engaged at play, and with their various amusements, they may fail to attend to the wants of the body, and by a repetition of this neglect they will lose the voluntary control of the function, and may become the subjects of some form of urinary disease, and will find it a great inconvenience and trouble. Teachers having the charge of children should recognise the importance of this physical requirement, and should never deny the entreaties of the child who begs for leave of absence from the class or school-room to obtain relief; yet we know that sometimes rules which have been adopted (more perhaps for the convenience of the instructors than with a view to the health of the pupils) have been so rigidly adhered to that children have been made to suffer, and in after years could date the origin of their protracted ailment to school-day restrictions; therefore if these guardians of the young, to whom

we entrust our household treasures, would bear in mind that while they are attempting to inculcate the rules of physiology laid down in their books, they must not at the same time be the means of enforcing other rules upon these young subjects, whereby they daily violate the laws of life by interrupting Nature's plan to rid the system of accumulating impurities. In adult life, when reason and judgment should control the daily acts, we see great wrongs inflicted upon the physical system, no doubt through ignorance of the result of a violation of its laws, or from want of moral courage to leave the presence of a friend or young companion to give heed to nature's call, and they will postpone for hours what they should at once obey, and, as a just penalty, they must suffer afterwards. Matrons, and mothers who should have long since learned the evils of such neglect, will themselves too often ignore these imperative demands, and are guilty of taking long drives, prolonged walks, or of remaining too uninterruptedly in the social circle, neglectful of the urgency of this important function, until the weight and pressure of the retained liquid cause congestion; or stricture of the neck of the bladder induces pain, or will

perhaps prohibit the natural flow, and from this more serious troubles will follow, even to a rupture of the cyst, by which death must terminate the suffering ; or if the case should not prove so grave as this, it may require prompt attention to relieve the rapidly-distending cyst of its burden, which object may perhaps be secured by the means of warm fomentations over the region of the bladder and the genitals, or by sitting over steam, or by a warm sitz bath ; and if such treatment fail to excite the flow, it must not be neglected, but the assistance of a nurse must be called in, or of a physician, who will probably, by the use of the catheter, afford the patient immediate relief.

Pain, with frequent micturition, are the usual concomitants of uterine displacement, in whichever abnormal position the womb may be found, as through the intimate relations existing between it and the other pelvic organs it will, more or less, infringe upon some parts, and the urinary cyst is very susceptible of interference. If the uterus sinks low in the vagina, it will, through its structural connections, draw with it the fundus of the bladder, and thereby diminish the capacity of that organ, and will necessitate

the frequent voidance of urine; and if the womb in its descent falls towards the lower segment of the bladder it will, to a degree, obstruct the circulation in that part, and congestion will be followed by inflammation, and pain will be experienced during the function of micturition. Often these complications exist in a marked degree without suspicion of the cause by either the patient or the physician, and the treatment is directed to the kidneys or to an obstinate irritability of the bladder, *a priori*; and the patient who has thus suffered for a long time becomes exhausted and discouraged, and from the failures attending the treatment prescribed for disease of the kidneys or bladder, as being the primary cause of her trouble, she loses confidence in the efficiency of all medicines, and almost in the wisdom of her medical adviser. And not until a proper course of treatment for uterine displacement has speedily restored her to health will she become convinced of the real seat of her long-standing and incorrigible complaint.

In a large and varied practice, extending over a quarter of a century, we have found the majority of these obstinate cases of "irritable bladder" are the result of the causes just

stated, and for which there are no means which will afford more immediate relief, and no more satisfactory treatment than the support of the womb in its normal position, thereby relieving the bladder from pressure, and affording it an opportunity to attain its normal capacity ; this, with proper attention to the general health of the system, will speedily establish a cure.

DISCOURSES TO WOMEN.

PART II.

REPRODUCTION.

CHAPTER I.

CONCEPTION AND MATERNITY.

THE study of the male and female, or the positive and negative forces, need not be eschewed as indelicate by even the most fastidious persons, when they are viewed in the light of agents known to operate in all parts of the universe, and to be essential for the consummation of Nature's great phenomenon, reproduction.

The condensed vapour in the form of clouds is subject to the laws of attraction and repulsion, and those soft, downy masses floating in the atmosphere assume proportions and shapes according to the intensity with which these forces are working, and although they are moved and swayed by the currents of air, they are doubtless greatly influenced, and perhaps more so by their polarity, or their opposite electrical conditions, the negatively electrified cloud attracting the more positively electrified

one, and as they approximate, the elements are disturbed and their union results in a flash of lightening, the sound of thunder, and a fall of rain.

The mineral and vegetable worlds also are replete with instances of these same operative laws. All fruit and seed-bearing plants prove the necessity of sex; the centre of the flower, as represented in the accompanying cut (Fig. 12),



FIG. 12.

LILY.

exhibits the stamens and the pistil, which being the organs of sex must each be provided with the elements required for the object in view, namely, the increase and multiplying of the kind, therefore the pistil, or female part, occupies a somewhat conspicuous position with its receptive stigma and its style or stalk, at whose base is the germ; while the anthers, or

clubs surmounting the filaments of the associated stamens, are laden with yellow dust or pollen, which male principle bears the fructifying elements to the female germ, and awakens the latent energy there stored, so that the seeds will fill and germinate. Plants endowed with the properties of one or the other sex, and growing at some distance apart, are aided in the transmission of the male element to the germ of the female plant by the winds and by insects, such as bees and butterflies, which, while they are sipping the nectar from the heart of the flower, gather the dust upon their legs and wings and carry it to the female flower, unconscious of the mission they perform, for while securing their own nourishment they are conveying to the germ cell of what would otherwise be a fruitless plant, the quickening influence by which the fruit is started into life, and whereby it may reproduce its kind, and perhaps serve as nutriment for man. This is a wonderful exhibition of industry, economy, and usefulness, to be viewed with admiration and humility. Behold the tiny insect! as with gold tipped wings it flutters over the cup of the apple blossom, humming its roundelay of gratitude and praise for the blessing of food it thus

obtains, while at the same time it is administering tenfold more generously to the wants of the human race !

The study of botany is not only permitted, but encouraged by parents and teachers. Young men and maidens may gather flowers from the hill sides and valleys, they may remove the bright coloured petals, count the stamens and pistils, and classify them according to the number, position, and peculiarities of arrangement. And the young people are happy in the pursuit of such information, for all scientific knowledge affords satisfaction and pleasure to enquiring minds, and when the research is carried further, they may apply the laws which govern the growth of flowers and may thereby be able to cultivate a more beautiful and superior quality of plant. If God in wisdom has so willed that the flowers of the field can be improved in their beauty and fragrance, that fruits can be increased in size and flavor through the application of known laws ; and that in the animal kingdom greater symmetry, strength and usefulness can likewise be attained ; and if by the application of intelligence, time, and money such great achievements have been won towards the perfecting of the flora and fauna, what might

not be done for the improvement of the human family, if even the same amount of effort were expended upon the study and application of its corresponding laws? Surely the effect would be marvellous, for human nature is more flexible, more susceptible of culture, and possesses greater capabilities, therefore the results would be correspondingly marked, and vastly more important.

Then the study of the laws of health and of reproduction, if from a philanthropic view only, should stand paramount to all other branches of science, and the youth of either sex ought to be early taught to respect and reverence that which is now impressed upon them as being degrading and impure, which popular opinion has clothed with mystery, and which prejudice and ignorance have made repulsive—the function of reproduction, whose governing laws are God-ordained, and the scientific application of which would bring to the human race a more certain basis for the perfecting of body and mind than all other means which can be devised—and with this object in view, humanitarians might labor from the rostrum, and clergymen from the pulpit; and with every judicious man and woman this subject should be introduced and

elaborated upon, as the only correct means of establishing a reliable foundation upon which can be based a high order of humanity.

It will be necessary here to sufficiently explain the physical structure of the two sexes, in order that the reader may comprehend the close relation that offspring bear to parents, and how entirely upon that depends the deriving of hoped-for benefits.

The female is the receptive sex, and in woman, at the appointed time, the ovum or germ cell of organization is developed through the function of the ovaries; and this ovum, when matured and subjected to fecundation, will be awakened into life for the development of a new being of the same species, but susceptible of great modifications, according to the conditions of the forces applied.

The life-inspiring force is the product of the male sex, and is generated in the organs called the testicles, which correspond to the ovaries in woman. The testicles are two in number, and are encased in a tegumentary sac called the scrotum. They are tubular structures of very fine and delicate proportions, each tube being about three feet three inches in length, and it is estimated that in each human testicle there

are as many as 1,800 feet of tubing. In these organs the spermatic fluid, or semen, is generated during sexual excitement, and is expelled during the act of coition or sexual intercourse, or under other circumstances when sufficient sexual irritation arises, either from voluntary causes or during sleep. In the latter case it may be the result of indigestion, or of reading books which inflame the passions and leave the mind too deeply impressed with their contents for these to be erased, and so during the hours of partial sleep a reaction upon the sexual organs takes place, and results in emissions; while in the case of voluntary emissions, they are the result of local irritations, either by the hand or by some unnatural friction of the parts; both conditions should be avoided.

If emissions are effected frequently, whether in sexual commerce or by the pernicious manipulation of the genital organs, they will prove detrimental to the health of the subject. The semen is the richest element of the blood, and might be compared to life condensed, and frequent expulsions of it are debilitating.

To avoid habits of self-abuse in the growing youths, parents should early inform them of the danger they are in, and teach them of the gross

injustice they commit upon their own persons by adopting any plan by which sexual excitement may be induced; and they should endeavour to inspire them with a high regard for what in the future will be the source of their greatest happiness, or what may prove to be the cause of their most poignant grief, by weakening the powers of both body and mind, whether the sexual crisis is brought upon the subjects themselves or whether it is from the too frequent indulgence of coition; the former course is the more injurious, from the unrestraint, and the solitary degrading habit affords no response of life, warmth, or nerve force from another to partially compensate for what has been wasted, as in the marriage relations, hence there is a mental and physical depletion most baneful in its effects.

In a healthy condition the emission is accompanied by a peculiar, characteristic experience called orgasm, which may be described as a nervous thrill, pervading the whole being for the time that the discharge is escaping, and which, in subsiding, leaves the subject more or less exhausted and inclined to immediate sleep. During the normal act of coition there is a similar experience of orgasm on the part of the

female, but there is no emission corresponding to that of the male. In her case, under favorable circumstances, the nervous sensations may be equally ecstatic, but this experience is not essential to pregnancy, for if woman yields a healthy, matured ovum, and it is met by the fecundating element of the male sex, conception may occur independently of any sensational ecstasy upon her part.

Human semen is a fluid of the consistency of ordinary mucilage, and resembles in color starch boiled in water; this fluid contains minute granules and animalculæ, or spermatozoa, which, when microscopically examined, present the appearance of oblong, moving bodies



HUMAN SPERMATOZOON.

(Fig. 13). Sperm cells differ in shape and appearance according to the species from which they are removed; the higher the grade of

animal, the more these resemble the lower form of animal life; in the human being they approach the appearance of worms.

During the natural relations of the sexes for procreation, the spermatozoa are thrown by an ejaculatory effort into the upper part of the vagina, and upon the os uteri; and through their power to move or vibrate, the small bodies find their way into the mouth and neck of the uterus, and to the angles of the uterus internally, then to the orifice of the fallopian tubes, and thence outwards; their natural tendency being upward and outward, following the course of the mucous membrane, and after the entrance of them into the fallopian tubes, the wavy movements of the ciliary or hair-like processes of the lining membrane of these tubes facilitate the outward going of the animalculæ.

It is the function of the ovaries, as before stated, to furnish the ova or female germs. After the maturation of these ova, the fringe-like extremities of the fallopian tubes grasp them from the sides of the ovaries, and through the same ciliary motions of the tubes the ova are brought into the womb; and it is conceded by the best authorities that conception usually

occurs, or that the union of the ova and the spermatozoa takes place at about the first third of the fallopian tube, measuring from the point of its connection with the womb, as seen in Fig. 14.

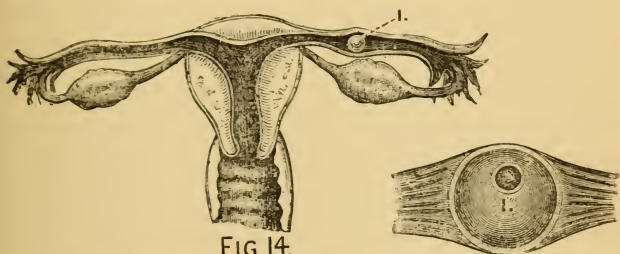


FIG. 14.

INTERNAL VIEW OF THE UTERUS AND FALLOPIAN TUBES.

I. I. THE OVUM.

This is a most interesting physiological act, upon which different theories have been devised as to the process of the approximation of the spermatozoa of the male and the ova of the female. A very beautiful and rational view of this subject was advanced by Dr. J. S. Longshore, and was published in a medical journal in Philadelphia a short time prior to his death. This theory was based upon the known laws of attraction between polar bodies, or such as are opposites in their electrical conditions, and upon those of repulsion between bodies of like electrical conditions. The details of his theory

upon this subject could not be here introduced, but he assumed that the propelling power by which the sperm cell was made to approach the germ cell depended upon the positively electrified condition of the one and of the negatively electrified condition of the other; and as these same forces are proved by the scientist to be operating in all departments of the great laboratory of Nature, why may they not play an important part in the hidden recesses of the human organisation as well as in the bowels of the earth and among the revolving planets? There surely must be some unseen force at work, beyond the mere physical one of the structure of the fallopian tubes. That the healthy spermatozoa is an essential element of the seminal fluid in the process of fecundation, and that the fully developed ovum is the other important factor in the process, is not denied by any physiologist. This much being acknowledged by all, doubtless more useful light will be thrown upon the subject, whereby the mysteries attending this important function of conception will be dissolved, and absolute knowledge, based upon facts, will take their place, serving the purpose of banishing all doubts and of overthrowing all further speculative views.

CHAPTER II.

STERILITY AND ITS CAUSES.

IF the spermatozoa are defective, and do not follow the general rule of activity for these infinitesimal bodies, and they fail to possess the power assigned to them, this is one of the causes why offspring may not follow coition; although the general appearance of health in the husband would never lead the unsuspecting inquirer to believe it could be his fault, and at once the defect of barrenness would be attributed to the wife, while she might, in fact, be perfect in her reproductive powers, and the husband, justly speaking, would be the one found barren. The lack of vitality in the elements of the seminal fluid may be due to the general ill-health of the person, or to the vital forces of the system being attracted in other important directions. Men who use their intellects excessively may thereby consume both blood and nerve force in the consummation of

mental tasks, until the sexual system suffers in consequence; or this condition may be the sequence of a fast, prodigal life, or of sexual exhaustion through the pernicious habit before referred to under the head of masturbation or self-abuse. If such a feeble, sexual condition exists, proper medical treatment to restore the general constitution, and particularly the sexual system, should be accepted. If there is too much mental strain, there should be a change of vocation, and entire continence from sexual indulgence for several months; with good nutritious food, rich in phosphorous and phosphatic elements, such as fish, oysters, eggs, brown bread, and oatmeal porridge; also the use of hot foot baths of five minutes' duration, to be followed by a dash of cold water and friction with a coarse towel or brush.

On the part of woman, menstruation may be regular, but the ovum may be without germinal spot, as the egg of the fowl may be without a yolk. If the ambitious poulterer discover this deficiency in his hens there will be means devised to bring about an important change; the hens will have a full supply of grain, sand, fresh meat, pepper grains, and lime, to restore their functions to a healthy, egg-bearing state.

With woman, the ova must be perfected to ensure conception ; and for this end she needs a course of diet suited to her wants. In every case the digestive organs must be in health, or food will fail to accomplish what otherwise it might ; and if the digestion is imperfect, the liver is very often involved ; so that the blood will not be made rich in the required elements.

After due attention to this, some preparation of iron may be found invaluable, such as ten grains of precipitated carbonate of iron, three times a day, fifteen minutes after meals ; or five grains of soluble citrate of iron, taken in half a wineglass of water. Rest, recreation, and change of locality will do much to invigorate the general system, and the ovaries will participate and will assume a more normal action.

A more frequent involuntary prevention of offspring may be referred to some malformation or derangement of the sexual organs of either, or both of the parties concerned. If it is discovered that the defect is in the male, the surgeon may soon rectify the parts, perhaps without any danger, and with but very little pain or inconvenience to the patient ; and from the time of this operation he may date the real commencement of his normal marital relation,

and a productive union may crown his joys with the blessing of an heir.

In the case of woman, we find that malpositions of the womb are the most usual causes of what is termed sterility, but which is, however, a misnomer for this defect; her ova may be natural, and become matured every month, and expelled in the proper manner; but if the uterus lies outside the natural curve which it should occupy with the vaginal canal, the os or mouth would be inaccessible, and the emission would be incomplete, and, therefore, unsuccessful. If the womb should, by some jar, or fall, or unusual strain, be forced to the right or left of the medial line of the vagina, the sperm cells would be thrown beyond the mouth, and in all probability would never find ingress there. Or if the mouth of the womb should press near the rectum, with the fundus, or top, to the bladder, as in anteversion; or if the mouth should incline to the neck of the bladder, and the fundus should lean towards the rectum, as in retroversion and in retroflexion, when the womb is bent upon itself, then sexual intercourse would prove futile, and more, for what should be a painless act often becomes, under such circumstances, a painful and dreaded ex-

perience on the part of the wife ; and proves almost equally unsatisfactory, if not actually painful, to the otherwise happy husband. Not only are both disappointed, but at times chagrined, that, after several years of a hopeful married life their union has proved so unproductive, and that their connubial bliss has fallen far short of what had been contemplated ; and all this disappointment and despondency is the result of a cause which might have easily been removed if the case had been properly treated, either before marriage or soon after, by restoring the truant uterus to its normal position, and by keeping it there until, through the renewed strength of the over-strained ligaments, it may be retained.

Non-production in wedlock is viewed by some with the superstitious notion that it is the result of a special Providence ; but such an idea may well be dispelled when we see numerous cases of married women who have been without children for from six to ten years, and who, after proper medical treatment or the use of instrumental support, when the system or special organs have kindly yielded to Nature's curative powers, assisted by a rational course of treatment, have produced offspring. This is

an evidence that it is the will of God for all His creatures to increase and multiply in accordance to His command; and knowledge upon these subjects makes it clear that deficiencies on either side may readily serve as barriers against obtaining what they most earnestly desire, children to bless their homes.

The womb may be prolapsed, may even at times protrude externally, but if, when it is reduced, and the mouth is in its normal position, conception may and often does occur. In this case the os uteri is accessible; while in other cases where the os uteri is out of its normal position and therefore inaccessible, though the womb is much less prolapsed, there is no probability of success.

Severe ulceration, profuse leucorrhœa, and excessive menstruation, all serve as preventives to conception, as well as many cases of dysmenorrhœa. Yet, at some more favorable period in any of these last cases, when the parts assume a more normal condition, either from medical treatment, or possibly without it, pregnancy may occur. Sometimes a visit to another part of the country, a seaside rest, or change of climate for a few months, induces a great change in the system, by which health may be con-

siderably, if not wholly, restored ; and upon return to home and husband, conception most unexpectedly takes place, and can scarcely be credited by either ; and the change of life may be suggested as being the cause of the symptoms present. This, however, proves to be untrue, and the long hoped-for time is come when both are to be blessed with offspring, though it may be at an age somewhat advanced. Such circumstances often cause a ripple of wonder in the suspicious minds of a neighbourhood ; and Mrs. Curiosity now has a fresh topic to discuss, and investigations must be made as to the probability of the husband of the woman being the father of the child, or was it begotten contraband ? To all this Mrs. Credulity, with eager ear, takes heed. Mrs. Grundy at once pronounces judgment, and the case is settled that all is not right, and that the origin of this most unexpected heir is not exactly orthodox. Hence a libellous reproach is started, based upon suspicion, without the least evidence of evil ; but it increases with a steady growth in proportion to the number of times the tale is told, how this wife went away upon a three months' visit from home (the date was recorded in the almanac), and how, just nine months after,

the child was born. This, to some, would be sufficient upon which to build a scandal that might, all the remaining years of her life, cast a blemish upon the reputation of a most moral, trustworthy wife, and a stigma, quite as indelible, upon the helpless child. Such incidents would not be taken up as evidence of impropriety if each individual gossip kept her own door yard swept clean; this would be sufficient to warrant her but little time to accuse or scandalize her neighbours. In this case, health was increased by the change of food, air, and the water which she drank; the rest from home duties, new conditions, and new associations, brought to her the requisites to procreate. The husband's continence during her absence, his different associates to pass his time, all conspired to the reparation of his vitality; and the result was as stated, a productive union, to be followed by an increased amount of happiness.

It is sometimes, but we believe not nearly so frequently as is supposed, that the mouth and neck of the womb are so much contracted that it is impossible for the sperm cells to penetrate; and often operations are performed, either for dilating the cervix by sponge tents, or the neck is opened by the surgeon. Under absolute

necessity for either, we should advise the same; but if the passage is adequate for the expulsion of the menses, there is sufficient room for the sperm cells to enter. Under ordinary circumstances any such interference would be useless and painfully mischievous. We have found much of the attending difficulty attributed to contraction of the neck of the womb, to be overcome by an adjustment of the organ to its natural position, and then supported daily by the pessary described; and the great success of this treatment in rendering women capable of maternity makes us free to express our entire confidence in the use of supports rather than in the painful, dangerous, and very frequently unsuccessful surgical operations which patients so often refer to in their own cases.

CHAPTER III.

THE MOST FAVORABLE TIME FOR CONCEPTION.

WHILE the ovum remains within the generative passages must be the most prolific time for conception.

The expulsion of the female germ may take place with the menstrual discharge, but the ovum is usually found to be in the procreative channel from one to fourteen days, indeed there are evidences sufficient to prove it possible for it to remain there fully sixteen days, hence it follows that conception would be more certain if coition took place just before or very soon after the menses. If copulation occur immediately before the menses, the spermatozoa might come in contact with the matured and escaping ovum, and the arrest might prove successful, or if soon after the same success might follow in case the ovum passes soon after the menses. By these suggestions we would not have the reader imply

that conception could not occur after the sixteenth day from the cessation of the menses, we are not quite sure but that it may be possible at any period of the month in some special cases. The irregularity of the escape of the ovum, and the continued vitality of the sperm cells in the warm, genial folds of the vagina, or in the enclosure of the uterus, being so indefinite, it is quite impossible to determine the exact procreative line. We will only repeat that just before the menses appear, and just after their cessation, will in all probability be the most successful time for the marital relation with hope of offspring.

Conception and births are of daily and hourly occurrence the year round, but as there are choice seasons for the coming into existence of all young creatures under our control, there may be one season more appropriate than another for the birth of the human species; and for many reasons the genial months of spring are desirable; this is the time for the springing up of the grass, the bursting of the buds, the blooming of flowers, and for the coming of birds; the fields are made pleasant pasture grounds for the skipping lamb and the frolicing calf, the mare with its foal, and the

fowls with their broods; now the forests are awakened into fresh life by the chirping of insects, and the twittering of birds from their lofty nests; all of this would speak affirmatively as to the spring being the time for the bringing into existence of mankind. The tender limbs and sensitive nerves of the soft, susceptible babe can better endure the spring and summer, and the child will be more likely to thrive than if it had been ushered into life in the chilling atmosphere of winter.

Another most favorable time for conception is when a child is greatly desired, when the maternal affections long for an object upon which to lavish themselves. Under such circumstances the mental and physical conditions are better fitted for the important task of starting into being a human organisation, to whom existence may be a welcome inheritance, rather than one who perchance may have little desire to live, and no feelings of gratitude towards the parents, nor respect for the laws of procreation, which will admit of the possibility of the conception and birth of undesired and unwelcome children, who must carry the unfortunate impress upon body and soul throughout existence, and possibly into the eternities.

Many women feel a delicacy about acknowledging their desire for, or love of children, as if it were improper or degrading, and they hesitate to call upon a physician to ascertain if there are obstacles in the way, and if so to find a remedy. We have had such call upon us, who, with a timid glance from one side of the room to another, to be quite certain that no one could hear, would say there was a delicate subject on which they would like to speak, but feared to do so lest some one might find out their mission; then to the question, "What would you like to say?" they would reply, "My husband and I were married six years ago" (or whatever number of years it happened to be). To relieve them of their embarrassment we have said, "And you have no children?" "No, no, that is what I wished to say." "And you would like to have some?" At once the answer would come, "He would, yes, my husband would like children," while her own heart was yearning for the same, but the acknowledgment was cautiously withheld lest it should be considered an unnatural or an immodest wish. There need be no feigned secrecy about such a normal desire, for it is one of the natural impulses of a natural woman's heart to love

and to desire offspring. Even in early childhood this love for the young is strongly manifest, and is encouraged by the mother in her infant daughter. With her own handkerchief she imitates a doll and places it in her little maiden's arms to be held and loved by her; and as she advances year by year her dolls are increased in number, beauty, and likeness to the living child herself. So up to the early days of womanhood these senseless imitations are dressed, undressed, and subjected by their mimic mother to all the necessary training which the child herself must undergo with her own mother. This develops and increases the natural love in the young creature's heart until the time when she arrives at womanhood; and this natural love, which has been warmed and cultured into life, need not then be crushed and crippled, neither need indifference be assumed to screen this inborn want of woman. It is as natural for a woman to love a little child, and to desire the care and training of it, as it is for her to carry out any other of her characteristic traits and inclinations, and she need not wish to hide this, the crowning charm of a true woman's nature. There are many women who would gladly exchange all the

other pleasures which the social world affords, for the happiness that children would bring them, as was the case of a young woman who came to consult us about herself; she had been married a few years, and feared she never would be blessed with offspring. Upon examination, we found the os uteri inclining to the left, and some congestion of the womb, which through the Spring-Stem Pessary and remedies were overcome, and in three months she entered our consulting room with a happy, beaming countenance, and said hastily, "I think I have good news to tell you." "Ah," we replied, "pray let us hear it," thinking she had heard of a coming fortune, or of a proposed visit from some dear friend. But the good news proved to be that she was pregnant; our joy was mutual, and we advised her what to do and what not to do, that her hopes might be brought to a successful issue; and what was told her then will be appropriate to the case of any one under similar circumstances. We advised her to be cautious not to over-exert herself in any way, not to walk hurriedly, and only a moderate distance; not to dance, ride on horseback, or drive rapidly over a rough pavement, not to wear corsets, nor to permit the weight of her

garments to hang upon her hips or abdomen. That she should by every endeavour encourage health and strength so as to give the best possible conditions to her developing child ; all of which advice she most stringently carried out, and at the full time she was delivered of a fine son, and although she endured more than the usual amount of suffering, her gratitude was boundless, and as she heard the first sound of her infant's wail, her countenance lighted up with joy. After due attention to the child we were about to speak to her, but did not, for her hands were clasped, her cheek was almost as white as the pillow upon which it rested, her eyes were turned to heaven, her lips moved, and as we stooped to kiss her brow we caught the whispered words, "Oh God, I thank Thee for my living child." This was a living picture of a truly thankful mother, and one which we should be glad to have transferred to canvas to adorn our drawing-room, that others might behold the sweet charm of heartfelt gratitude when a hopeful woman is favoured by the coming of a welcome child.

CHAPTER IV.

VOLUNTARY CONTROL OF SEX.

MANY theories have been advanced upon this interesting subject, and almost all parents would be willing to pay a fair price for reliable and proper information upon it; and yet we should not feel justified in stating that we entertained implicit confidence in any of the popular theories which have been published; but in justice to the reader we may give some of the opinions which have been handed down from the time of Aristotle to the present day. One writer declares that sex is dependent upon the experience at the time of coition, or in other words, that intensity of passion controls the sex; the one of those concerned in the act who is the most intense will favor the similar sex being produced if pregnancy results. We cannot accept this theory, because there are many cases of conception where the mother bears a female child when she has been but a

passive and submissive partner in the act ; and, as has been heretofore stated, she may conceive when unconscious of the required relation through the stupor of intoxication, the influence of chloroform, or other causes which have rendered her indifferent, and the female sex is just as liable to occur as the male under such circumstances.

Some teachers have decided that the period of the month has control over sex, that if copulation occurs soon after the menses the result will be a female child, but if later on, or near the time of the menstrual approach, that the result will be of the male gender ; but this must be well tested to be accepted.

Another theory advanced is that the moon controls the sex, and we are not prepared to deny the power alleged to this great controller of the tides, and as the gardener declares of the vegetables he plants, that if the moon's phase is favorable his crop is a success ; so in the case of offspring the new moon is said to favor the female sex, while the moon's last quarter is supposed to be the time to beget the male sex. It would be well for the ambitious prospective parents to try the power of Phœbus.

And some savans attribute the power of

sexation to the ovaries; they say that the right ovary will yield the male sex, and the left the female, and that therefore the position of the right or left side must be chosen immediately after copulation to ensure the sex, or we suppose to facilitate the approach of the spermatozoa to the germ cell of the ovary corresponding with the sex desired. There may be some truth in this theory, but there is much uncertainty attached to it, as the time for the spermatozoa to gravitate to the ova has not been exactly decided upon, it may require six or twelve hours after the sperm cells have been deposited; then the right or left position must be maintained quite a sufficient time for the effect to take place, or the desired sex will be interrupted, and what may follow no one can decide.

Plutarch and others declare that the paternal parent has the supreme authority over sex, and that if the sperm cell emitted from the right testicle is the fortunate discoverer of the matured ovum, the result will be the male sex, and if the product of the left testicle should come in contact with the ovum, the female sex will at once develop. If such should prove to be true, the difficulty of presenting the proper

sperm cell to secure the desired sex would be almost insurmountable ; however, this may all be made clear in the future, when more time has been devoted to experimenting upon the subject with the one great object in view ; but for the present it is wise to accept the sex, whichever it may be, with love and gratitude, and seek to know how healthy, well-organised children may be born who will find life a blessing, and who may bless their parents in return for the life given ; then either sex may prove a great comfort, and both may accomplish much towards improving the condition of the world, and so live as to be much loved, and greatly missed when time is changed for eternity.

CHAPTER V.

FÆTAL DEVELOPMENT.

AFTER the sperm cell of the male meets the ovum of the female in about the first third of the fallopian tube, when all conditions are favorable to conception and a new being has entered upon development, under such circumstances the ovum viewed through a magnifying-glass presents the appearance of having been bisected, or cut into two equal parts, which appearance soon changes to one of a more divided condition, and in a few days the progress is such as to indicate a still greater disturbance of the structure of the germ, until it might be compared to the yolk of an egg slightly beaten with a fork. All of this stage of action comes under the head of segmentation or division; then, as time advances, an indefinite form becomes visible, until after six weeks of pregnancy the shadowy figure has assumed something of the appearance

of a thick worm or grub (Fig. 15), with a per-

Fig. 15.



EMBRYOTIC DEVELOPMENT.

ceptible enlargement at one extremity, which is destined to be the head, while the opposite part is pointed, and this is really the end of the developing spinal column.

Fig. 16 gives a magnified view of both the embryo and the uterus. Here the embryo (so named from its being incomplete) is suspended by the umbilical cord, and is seen floating in the amniotic liquid, which serves as a soft, yielding support to the developing body, and affords an opportunity for great mobility. This fluid varies in quantity, and at birth there may be no more than an ounce, while in some cases the quantity equals from twelve to sixteen ounces, or it may even surpass the last-named figures. Some authors have attributed nutritious properties to this fluid, which are probably absorbed by the surface of the foetus; but others consider its principal office is to act as a support and source of lubrication. Let this be as it may, it is not yet known that the

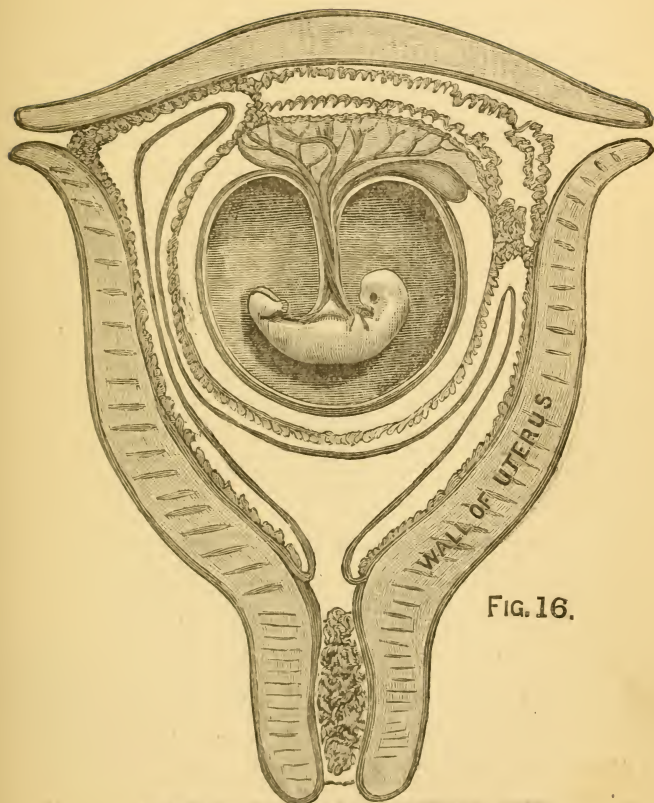
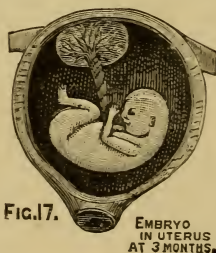


FIG. 16.

EMBRYO AT 6 WEEKS NATURAL SIZE.

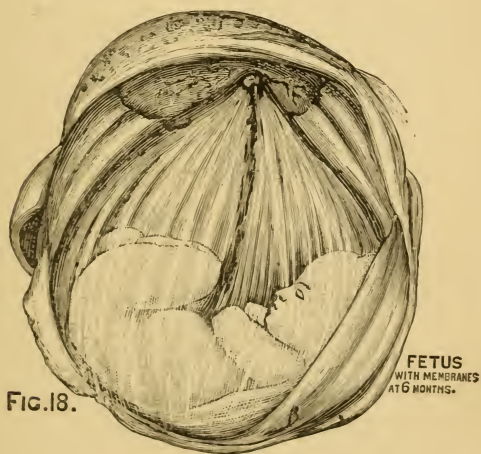
increase or diminution of its quantity can be effected by the subject to any appreciable extent through obedience to any known law, therefore we need not dwell at length upon it.

Gradually the embryo develops, until at the end of the third month (Fig. 17) the body and limbs are distinctly formed; the hands and



feet are quite perfect, the eyes are set, and the mouth and nose can be easily distinguished; the entire length of the body at this period being from three and a half to four inches, and weighing from one and a half to two ounces. The internal organs assume a natural form and size, and the weight progresses, the name of embryo is dropped and that of fœtus becomes more appropriate. At six months (Fig. 18) the body has greatly increased, and features are perfect, there is down-like hair upon its head,

and the skin is of a rosy hue; at this stage, the fœtus, if born, might survive for a short time, but all the organs being so soft and delicate, their functions could not be continued for more than a few hours; it has scarcely yet become an independently existing creature.



At seven months the child may live and develop into a strong, healthy person. At eight months there is an increase of vital power, and nine months is the full time of gestation. It is possible for the fœtus to be retained in utero up to the tenth month, but no doubt in many cases of supposed retention

for a month or for a longer period than the ordinary time of nine months, there has been miscalculation on the part of the mother or midwife.

Parturition, or the birth of the child, usually occurs about the time of a natural menstrual period, and if the ninth month is passed it is quite reasonable to presume that the effort will be deferred until the next menstrual period, or the tenth month ; but extra exertion, a jar, fright, or sudden shock, would result in labor at any time, irrespective of the menstrual climax.

MONSTROSITIES AND PLURALITY OF OFFSPRING.

It is reasonable to believe that human reproduction is governed by the same laws which control the development of the inferior species. In the production of fowls, for instance, if the eggs of the hen yields a chick with irregularities of form, it is fair to conclude that there has been some abnormal condition in the egg ; if two chicks issue from one shell, it is reasonable to suppose that there had been two yolks in the egg ; or if the egg has yielded but one chick, and that unusual in its proportions, a monster in

form, having two heads and one body, or two bodies and one head, it would be fair to believe there had been two germinal points in the yolk, and a confusion of development was the result. So in the human ova there is a possibility of the same conditions, which may result in an equally unfortunate organisation; and where plurality of births occur, as in the case of twins, triplets, or of any number above, it is again reasonable to suppose that there had been two, three, or more ova matured and fecundated at the same time, and so resulted in the same number of offspring.

In the practice of obstetrics or midwifery single births are by far the most numerous, but twins are not unusual. While we were attending upon a lady in labor, who was naturally small and slender in form, a friend by her side made the casual remark that she would not be surprised if she gave birth to twins. "Oh, no," the lady replied, "I do not expect to have twins, that would be too much like the brutes." We thought it was neither wise nor kind to cast such a reflection upon mothers who had increased their families by sometimes one or two pairs of twins. However, in course of time one child

was born, followed very soon by another, and in about two hours after a third child made its appearance. So on that occasion three female children came to bless the parents, each one weighing somewhat over five pounds, and the mother never again referred to the brute creation. The fact of having a plurality at a birth does not imply brutality of function; the cow and the mare are no more liable to have a plurality than a human mother, and such thoughtless insinuations may reflect upon ourselves, or upon some friend whose feelings would be greatly wounded if such had been, or ever should be, her experience.

CHAPTER VI.

THE SYMPTOMS OF PREGNANCY.

THAT it is desirable for all women to have theoretical information upon the usual symptoms attending the interesting process of gestation must be acknowledged by all who have passed through this anxious experience. This information fits the wife for the coming event, as she realises from week to week the conditions that she has been taught to expect. She can prepare the needful articles for both herself and her child with an assurance that all is well, or otherwise, and her knowledge frees her mind of unnecessary anxiety, for she daily meets with what she has anticipated, and can rest satisfied with her condition. Also every new symptom will naturally develop a growing interest in the cause of it, and her love will increase with her child's development, whereas if she were not apprised of these coming conditions, alarm, anxiety, and rest-

lessness would be her unpleasant experience, and fear would take the place of the contented mind of those who know that all is well.

After conception the menses cease, yet there are cases where they continue to return regularly every month, with perhaps some variation as to quantity and quality ; but this is not a favorable condition, though there is doubtless always a tendency in that direction at every coming period, as when not pregnant ; but now all the surplus energy of the system and vital forces is required to develop the new being, and also to sustain the mother's vitality, and when there is a wasting of blood during pregnancy, it suggests an abnormal condition, and both mother and child must be more or less affected by the depletion. The next indication is usually more or less irritation of the stomach, nausea in the morning, sometimes immediately upon arising, or it may come on after the first meal ; this morning sickness becomes a great annoyance, and in some cases is very exhausting, yet there are exceptions where there are no symptoms of nausea during pregnancy. The mammary glands become enlarged, and a circumscribed areola develops about the nipples ; if the complexion is blonde, this

circle is pink in color; if brunette, the color is often quite dark; and if the subject is not informed that such changes will occur, she may become alarmed, as some have done, and feel the necessity of consulting a physician as to what she shall do, imagining that mortification may set in. The appetite becomes capricious, and desire for certain articles of food is in some cases a marked symptom; sometimes it is for acid or for alkali, sweet or bitter, certain fruits or meat; and even at times there is a strong inclination for some peculiar beverage, wine, brandy, or gin; and it is well to appease this urgent demand when it is irresistible, as the effect is not favorable to the child, for mental impressions are often very decidedly fixed upon the offspring, and the longer the want is experienced the more indelible will be the impression made upon the plastic mind of the child. The abdomen becomes enlarged, and the waist increases in size, when at about four-and-a-half months, or the middle of the term, a quickening or motion is usually observed. This may be recognised at first as of a fluttering character, just below the umbilicus. This symptom varies in time in different subjects; some declare that they experience it at three

months, others not until six months, but foetal motion cannot be produced until the muscles acquire contractibility, and the suspected premature motion may be nothing more than abdominal contraction, or a nervous sensation produced by the sympathy existing between the uterus and the associated viscera. No one or two of these various symptoms will serve to guide a person to a correct conclusion, for under the influence of disease any of them may occur; suppression of the menses may follow a cold, or the mammary glands may enlarge through sympathy with the uterus, for the mammary glands, the uterus, and the ovaries stand as a tripod of organs for procreation, as they all assume an interesting and important part in that function, and they take their turns in a very systematic manner. The ovaries perform their function by furnishing the matured ova, and this act demands an excess of blood to these organs for the purpose; after conception the uterus becomes the centre of the vital forces for the development of the foetus, and for itself to be fitted to maintain it. After the birth of the child, for a time the ovaries and the uterus have a period of rest, while the mammary glands assume their function of lactation, until

the ovaries regain their wonted power and once more begin to ovulate ; so these three classes of organs work together and sympathise with each other to a great degree, and when one part becomes disturbed the effect is felt throughout. Ovulation frequently commences during lactation, and even pregnancy may occur prior to the appearance of the menses, while the blood continues to supply the mammary glands with milk ; but, for the health of the mother and the well-being of the foetus, under such circumstances, the child should cease to be nursed, and the glands should be permitted and encouraged to yield up their function to the other and more important one of gestation.

When it has been decided, by a due consideration of all the symptoms of pregnancy, that such is the condition (which decision may usually be based upon the fact of quickening), the infant's wardrobe should be prepared ; every article of dress for the coming stranger should be made with a consideration for warmth and comfort, and with a due regard for beauty. The diapers for a young infant should be of soft, old linen, rather than of stiff, new material, as we have often seen in use in nurseries ; and these should be secured to the

body by safety pins; sharp pointed pins must never be permitted in the fastening of infants' clothing; much injury has been the result of unprotected pin points. The swathing for the abdomen, or the "belly band," may be made of soft flannel, irrespective of the season. The width should extend from the top of the hips to the lower edge of the ribs, or eight inches, and one thickness is sufficient. The ends of the band might be double for three inches, to enable the nursery pins to be retained securely, and this also allows for the rapid growth of the child, as the band can be lengthened to correspond. The flannel may be cut straight, and the edge turned down and "cat stitched" instead of hemmed. The shirts may be made of flannel or linen, or of soft, fine, cotton cloth, and, for convenience, these may be made open in front the entire length, which would not exceed twelve inches. The petticoats should be of soft, warm flannel, cut in a manner so as to be wider at the bottom than at the waist, to prevent the folds and plaits which would cause pain and uneasiness as the child lies upon them. The mother, or nurse, must have her night-dress drawn smoothly to lie upon; but if tender, little

babes cry out when permitted to lie upon gathers and bundles of plaits, they are supposed to be ill, or very cross. The waistbands of the petticoats may be of cotton or flannel, as the mother prefers; but, in either case, they must have armholes, so as to support the garment from the shoulder, rather than depend upon keeping it in its place by merely fastening it about the waist. The fastenings should be nursery pins, buttons, or strings. Two flannel petticoats will be quite sufficient to be worn at one time, or a pinning blanket and one flannel petticoat, with a cambric skirt over it, next the dress; then a double gown over the dress. And if the weather is cold, the double gown is a very important article. It should be made loose, with long sleeves, and should fit closely to the neck. The dress should be of soft cambric or muslin, without starch, and should also have long sleeves.

Infants should wear stockings long enough at the top to pin upon the diaper, to protect the legs from cool air when lying undisturbed, and more particularly when removing and adjusting the diaper. The cool hands of the mother or nurse, and the chilling air surrounding the limbs are frequently the cause of pain,

and the distress which the little one experiences converts what would otherwise be a quiet, contented child into one that is restless, crying, and unmanageable. The first stockings of an infant should be knitted, or made of flannel, without much regard to fitting the tiny leg and foot ; protection is the question here, not elegance.

Prospective mothers should be careful not to spend too much time in preparing this little wardrobe. Sufficient changes are requisite ; but much embroidery, many tucks, and slow, tedious, fancy work add nothing to the comfort of the child, and may prove most detrimental, as once happened when a hopeful prospective mother, who, while waiting for labor to proceed, exhibited her large accumulation of baby clothes. With pride she discoursed upon this robe, then upon that ; all were richly embroidered, and must have taken much time and exertion to accomplish ; and the position of her body while thus occupied was unfavorable for the proper growth of her developing child ; and alas ! when the babe was born, it was dead, and from its appearance it had been so for several days. This poor woman's heart was nearly broken ; she could not be calmed. Why

her child should die when there were means to support, to educate, and to provide for all its wants, was a mystery to her mind; but her fond, loving heart could not undo the wrongs she had unconsciously committed. She had sewed and stitched; had sat long hours engaged in the pleasant task of weaving threads into little garments which were destined never to be worn; for at the same time she had broken the thread of life in the precious bud which depended upon her for development and existence. She had violated the laws by which her child's life was sustained; and so, in sorrow and anguish, she had to suffer the penalty.

CHAPTER VII.

PRE-NATAL IMPRESSIONS.

THE wonderful power possessed by parents to control the development of their offspring, from the time of conception and during gestation until birth, should be fully appreciated by all who assume the responsibility of having children.

That children are born with certain peculiarities of structure and with individual characteristics cannot be doubted, and that certain forces must have influence in the moulding of the entire body, which, of course, includes the brain; and it is equally certain that as the brain is formed so the mind must act upon it, for the brain is a material structure which might be compared to a musical instrument whose tone will be according to its structure, for if the instrument is not properly proportioned, the most skilful hand cannot produce from it harmonious sounds; so it is with the

brain, upon which the master spirit of a human being, the mind, must manifest itself according to the machinery upon which it works.

As the quiescent germ-cell of the female is awakened into life by the activity of the male sperm, this positive force carries with it influences of the one from whom it is projected, and antecedent generations have more or less controlled the characteristics of its power.

The paternal parent must wield a great influence over the mind and body of the growing entity. His life-awakening cell might be compared to the seed of a plant; the character of the coming plant must be as the parent seed, although it will be greatly modified by the conditions of the soil into which it falls, and by the subsequent surroundings; even before the shoot of the young plant is visible above the surface of the earth much can be done to perfect or to distort the germinal process. Men should realise the great responsibility which the position of a parent involves. The health of their own bodies should be the first consideration; it is true that the sperm cell may maintain vitality, and may fecundate even when the male from whom it is developed is languishing with disease, but the sperm cell

must participate to a great extent in the general conditions of the individual, and it is no wonder that we see so many feeble children—that so many die in early infancy, or linger on in such a state of mind and body that life is not worth the physical suffering and mental disability which must be endured—when we behold the painful sight of so much disregard for health on the part of the male sex of our own species—when we know that the daily lives of the majority, either through ignorance of the result, or through selfish recklessness, are such as will stamp posterity with the seeds of physical and moral death. We feel that there ought to be something done to stay the progress of this great wrong to the coming generations, yet in the midst of plain, unvarnished facts humanity lawfully repeats itself with all its dark and hideous deformities without a ripple of dissatisfaction either from the philanthropist who is anxious to suppress human wrongs, or from the clergy who are seeking the redemption of fallen man—neither of which will be accomplished until human generation is guarded by a knowledge and application of its laws, and until we cease to see mortals clutching at the license which human law confers for a wise

and moral purpose, and wildly, madly propagating what too often proves to be a most unwelcome and unfortunate class of humanity.

The habitual use of fermented liquors and the unhealthy consumption of tobacco must poison and enfeeble the constitution of both father and child ; many children are born with a desire for alcohol, and are craving and restless until their lips are moistened with sweetened drug, which is swallowed with avidity ; in another, the inherited desire is for tobacco, which yields a solace nothing else can give. Such cases could be quoted in great numbers, but a few will illustrate the fact. A lad of fourteen years came for us to go to see his mother, who was ill, and as he had walked some miles we asked him to jump into our carriage, which he did. We noticed that he was chewing something uninterruptedly, and we said, "What are you chewing?" With a peculiar twinkle of his eyes, as if he thought it might not be right, he at once replied, "Bacca." "Tobacco!" we exclaimed, "and do you chew tobacco?" "Yes, marm." "Why do you do that?" "Because I like it." "How long have you chewed tobacco?" "Always, since I was a baby." We remarked that it was a very bad habit, and that he would

not be strong, nor grow to be a large, useful man if he continued it, and said, "Why do you not stop it?" "I can't," was the quick reply. Upon inquiry and reflection, we presume it would have been a difficult task to break it off, at least at once. A taste and desire from birth, and long before, had been firmly established in this boy's organization, for his grandfather smoked and chewed, his grandmother smoked, his father both smoked and chewed, and his mother smoked tobacco, so what could one expect of this poor tobacco worm? He was a thin, yellow, wrinkled, shrivelled-up specimen of humanity, and although the reader may exclaim this was an extreme case, yet thousands might be recorded, and the effect of this poisonous plant must be deleterious even when used in moderation.

Another instance we might cite of a youth of brilliant talents, who, with physical strength equal to his ambition and natural ability, might shine as one of the brightest stars in the galaxy of intellect, but who now struggles under the influence of a tenacious love for tobacco, which he can take in almost any form, and has done so from a child; and this is another example of unfortunate inheritance from grandfather to

father, and so to the child, who, now a man in years, suffers from great nervous prostration, with very unfavorable symptoms of heart disease, and without doubt tobacco is at the root of both.

Before and after marriage, the passions also should be trained to be subservient to the will and reason; the libidinous habits too often indulged in must enfeeble both body and mind. The procreation function, and all pertaining to it, should be held sacred, for when the richest elements which the blood can supply are wasted time after time regardless of consequences, and only to gratify a morbid sexual passion, the system becomes exhausted of its richest pabulum; and the sperm cell, although it is possible for it to call forth a response of life from the germ cell, cannot yield the full vitality which, under more favourable circumstances, it would have done, and the consequence is feeble, weak children, who, if life is maintained, will not have robust constitutions and the strength that every human being needs to battle with life's experiences, and to surmount the obstacles to be met on every side with that ease and pleasure which good health would enable them to do. Mothers are equally responsible for the part

they take in this procreative function, for they become creators of more than they really know. The plastic germ lies hidden from their sight, almost from their knowledge, and it is for them to learn what they may and do perform towards the development of this the most important germ in God's whole creation.

In wisdom a woman should accept her husband and the father of her children; and prior to this she should acquaint herself with the important laws, which as surely govern the propagation of our species as their respective laws govern the reproduction of plants and animals; that her life shall be spent to the glory of God in the true sense by obeying His laws in the performance of this, the most important mission he has given to her, the bearing of children, and as they must reap what she has sown, whether it be tares or wheat, all things should be well considered for their good. The mother's food, drink, general habits, dress, sleep, exercise, and rest must all be directed so as to promote health and strength, that her blood shall possess the proper nourishment for what in the future she may be proud to call her child. And after marriage, when conception takes place, she must guard with a jealous

love the little bud of coming humanity ; and now her life should be almost consecrated to the task of motherhood, for through the circulation of her blood, now in the growing offspring's tiny veins, great results may come. From the nourishment she takes her blood is formed, hence her food becomes the food of her developing child ; and, as the moisture from the earth and the warmth of the atmosphere influence the growing plant, so does the mother's condition, good or bad, influence the child for good or for evil.

The mental condition of the mother through this close relationship must strongly impress both the body and mind of the recipient embryo. We see wonderful effects produced upon one person by another through the power of will, or psychology, and this effect may be produced even when distance comes between the subjects. Instances are numerous and indubitable, though time and space will not allow of their special mention ; but if action and thought can be thus controlled by the power of will between independent persons, unrelated by ties of consanguinity, and when separated by water and by land, how much greater must be the effect upon one's own offspring when everything favors this im-

pressibility. Even the features may be moulded to correspond with the mental condition of the mother. If she desires beauty and symmetry of form she must have her own mind filled with the ideal she would imitate, either through her own vivid imagination of the beautiful, or by some object which impresses her mind through her vision; it may be a favourite picture which often meets her view, or the face of one she greatly admires. Sometimes very strange resemblances are met with, and without a knowledge of the facts of transmission of mind to body, and it is as great a surprise to a woman to see her child bearing similar features or peculiarities to those of some friend or neighbour, or of one with whom she had never spoken, as it is to her friends who may note the same. A lady once asked how it was that her son looked so much like a certain clergyman; and one to whom she had never spoken and had only seen in church, but upon inquiry we learned that she usually went to his church both morning and evening, and that she had enjoyed his sermons much. His discourses were to her encouraging, and one can readily understand that although there was no friendship, not even a speaking acquaintance between her and that clergyman,

as she sat two hours every Sunday listening to his discourses, and whilst the good words warmed her heart her eyes were fixed upon his features, until his eyes, forehead, chin, lips, and expression of countenance became indelibly stamped upon the plastic features of her unborn child, and that this child should have a stronger resemblance to the clergyman than to her husband, who was its father, was not a marvellous circumstance; for we presume that that wife, or any other, never sat for two hours, on any one day in a week or month, to view so interruptedly the features of even the husband of her choice and love, for it is but seldom that husbands give their wives the opportunity for such an indulgence, even if the wives should greatly wish to gaze at them.

It is well to avoid all unpleasant sights, such as death scenes, and illnesses where there are facial contortions, or where limbs are convulsed; any such vivid impressions may have a very unfavorable effect. Scoff at, sneer, and deny the possibility of such results as some would-be-wise ones may, the facts are too numerous, and the effects too serious to pass by this subject lightly. It is right that every prospective mother should guard herself from either physical

pain or any unpleasant mental condition. A lady had three little daughters, and she was anxious for a son; she became pregnant, and during the time she thoughtlessly attended at a state fair, where several thousand persons were collected; while upon the grounds she felt a very great need to evacuate her bowels, but the inconvenience could not well be overcome, so she was compelled to suppress this urgent demand until she returned home; in due time the little son was born, perfect to all appearance, and beautiful, but he only lived eleven days, and during that time he never had an evacuation of his bowels, and there is no doubt that the concentration of the mother's mind upon her own pained condition was conveyed through her nervous system to the rectum of the fœtus; this coincidence is worthy of notice. In another case, where a child was born with deformed feet, the mother asked what was the probable cause of it, as she had never before seen such a deformity; the thought was suggested that she might have suffered in her feet, and the question was asked if her ankles or feet had ever pained her during her pregnancy with him; "Oh, yes," she replied, "for I had to work very hard, having eight in family," and

she did all for them, and in the evening she would sit and rub her aching ankles to get some ease; so the child's feet were much deformed and the ankles very weak. Again, another marked coincidence, where a pregnant woman suffered much with her back, the pain was almost unendurable throughout the period, and her babe suffered under the misfortune of spina bifida, or a missing vertebra, with a sac of water where the bone should be; the child did not survive many months. Such coincidences should warn women against permitting themselves to endure severe suffering during such an important period; no time nor money should be spared to secure health for the sake of the irresponsible little being yet to come, and for her own sake also. Under the responsibility of pregnancy no woman should permit herself, nor be allowed to overwork, nor to suffer what can be remedied; there is no economy in sparing means when so much is pending. It is a great mistake for prospective mothers to indulge in mingling with promiscuous crowds in public places, in theatres, at negro minstrel performances, and menageries, where strange, wild animals and monstrosities are exhibited, all of which may leave a lasting impress, to the

sorrow of the parents and to the misery of the child.

A husband should, under the condition of the pregnancy of his wife, be ever thoughtful to make the mother's life as pleasant as it is in his power to do, and he should remove from her presence any repulsive objects or persons that might daily offend her mind and cause her trouble. His love and kindness should be a shield and protection to her under all circumstances ; but when she is giving life to another, for his happiness as well as for her own, he should not permit any unnecessary annoyance to disturb her. She has now quite enough to bear that is impossible to avoid, so the burden and the pain should be made as light as the application of knowledge, wisdom, and loving kindness can make them.

Every ambitious parent must desire an intellectual child, as well as one of handsome form and features. Then the same laws should be put into effect, and the mother must exercise her intellect. She should read, think, and study ; but here there should be a limit, or the vital forces may become inharmoniously distributed, and in the development of the brain the body may be deprived of its due proportion,

and a feeble constitution must result. It would be wise for the mother to divide her time between study, exercise, and social enjoyment; by so doing she may develop a harmonious organisation, and be well repaid for the pains she has taken. If any particular intellectual stamp is desired, the study and contemplation of that one branch should stand paramount in her mind; if law is the choice, then she should read and study Blackstone, argue and talk, and plead for her imaginary client, and her husband may for the time be her opponent, then after the mock trials they may shake hands and be good friends, as lawyers do, and be even warmer friends than they can be, for in this case there is a mutual interest in the cause in question.

If the medical profession is the choice for the unborn son or daughter, there should be a diligent perusal of some volumes upon the structure of the human system, and study of the functions of the organs, and the laws which regulate them. If it is the ministry of the gospel that is much desired, the mother must devote herself to religion. She should go to church, not to exhibit her new dress or her charming hat, but in sincerity to worship God. She should pray, but not in public only that the

world may see and hear the prayers she offers, for such services might produce a hypocrite; but an humble, earnest petitioner, whose devotion is quiet and unobserved, may have the rich reward for which the mother's heart has yearned.

Music, art, and mechanics may all be thus implanted in the plastic brain cells of the mysteriously developing new being. The members of the religious society of Friends, or Quakers, are not distinguished for remarkable musical talent, because for generations this faculty of the mind was rigorously suppressed; not that there was supposed to be absolute evil in music, but rather that it was a faculty in the human organisation which was susceptible of abuse, so it was almost entirely discarded. Songs were considered to be trifling, and often untruthful, the words being composed more for effect than to convey truth to the mind, and to sing hymns without the mind being duly imbued with the spirit of the words was judged a practice of hypocrisy, therefore vocal music found no favor in this society; and instrumental music, from its requiring so much practice to attain proficiency, was considered almost as a waste of precious time which might be more profitably spent. All music was, until a com-

paratively recent date, discouraged and abandoned by Friends, until whole families were void of any natural capacity for that art, and as there was no opportunity for the latent talent to develop, it would consequently weaken and become inefficient even for the distinguishing of one tune from another. Some of the early Friends were dissenters from religious societies, whose services consisted largely of vocal music, and these retained their natural talent, and transferred it to their children, even to the second and third generations, as has been exemplified in a family which consists of six sons and three daughters, not one of whom can carry a tune in their mind, and scarcely even recognise one air from another, as a sequence of their early Quaker training, for they were never allowed to sing nor even to attempt it. Yet strange as it may seem, five children of one of the daughters, and the only child of another, are remarkable for their musical ability, which is certainly an inheritance from the grandfather, who, in his youth, prior to his religious scruples, was an accomplished musician. The talent in this case was transmitted from grandparent to grandchildren without any effect whatever upon the mothers of these musical prodigies. This

is only one of many examples which might be given of how, by the laws of heredity, the good or evil qualities, not only of parents, but of grandparents, may become prominent traits in even the third generation.

Persons who must from necessity think, and plan, and calculate, will surely be blest (all things being favorable) with the most skilful and practical offspring; for instance, the pregnant mother, with several children to feed and clothe on limited means, must necessarily think how it is to be accomplished; her son must go to school, but how can she furnish him with neat, sound garments to fit him to associate with others, perhaps more favored with worldly comforts? After much reflection she looks over cast-off garments which her husband long since ceased to wear. Among these are his wedding trousers—soiled, torn, and much the worse for long and perpetual use; now in this emergency a thought flashes into her mind and makes her very happy—out of these old garments she will contrive a suit for her little son. These are to her a treasure, and valued as much as a purse of gold would be by a person of greater wealth. With pleasure she carefully washes, rips, and presses all the parts, and with her paper

pattern tries to make the pieces all come out ; first the paper is laid this way, then that, with a corner piece put on here, and a rent darned there, she thinks and plans how to get that tiny suit with as much care as one would bestow upon the building of a house. At length she triumphs, and with delight she fits the garment to her son, and adds to the happiness of her family by her perseverance and ingenuity. Now the boy can go to school ; and the while she was planning, constructing, and speculating over that dusty, musty cloth, she was weaving real genius and mechanism into the developing mind of her coming child ; and if education and circumstances favor such a result, that child when matured will be a master mechanic of rare ability, and the foundation of his future success and fortune was laid during the construction of that suit of clothes, and from other similar circumstances. From these facts, persons of limited means may take heart, and need not despair nor be discouraged, and suppose that they are not sufficiently supplied with worldly wealth to venture on parentage. It is often discovered that this class yields the clearest heads, the warmest hearts, and the best physical organisations in their children, all of which

qualities are a more desirable inheritance than wealth in gold. Upon the same principle unfortunate and most undesirable natures may be produced; licentious and lewd characters, also thieves and murderers are the results of these same laws. It is a bitter reflection for parents, and one which some would be tempted selfishly to deny; but the facts are potent to convince, if we but permit our mental vision to be cleared of prejudice and ignorance, and if we are but willing to view the works of our own creation and boldly accept the facts, and if we have been unsuccessful we may be of use to others; by earnest entreaties we may be able to save future generations from causes which have blackened and deformed too many of the present race. Parents of the human species violate physical laws, which even the animals regard more physiologically with reference to their sexual indulgence. During pregnancy a human female now yields either to her own abnormal passion, or to the uncontrolled passion of her husband, during the entire period of gestation; which, judging through a process of reasoning, and by analogy, is very unnatural and pernicious in its effect upon posterity. What can we hope for, under such circumstances, but offspring who

will repeat the perversions their parents have in them so thoughtlessly or ignorantly implanted.

Therefore, in consequence of such disregard of the laws governing the development of the human race, it presents a very different moral and physical aspect to what it should do. What it is, we see ; and sadly the facts reveal what is often loathsome and too monstrous to repeat. Well may the outcry come, " Why is there so much licentiousness, so much evil among both sexes ? " Why are men so mad with heated morbid passion that they will sacrifice all they possess, their wealth, their honor, their fame ? Yes, they even jeopardise their lives to the means for the gratification of what a brute would scorn, by which innocence is made to suffer and brought to lasting shame. Crippled and diseased, crushed and demoralised, through the passionate violation of their tender forms by the stronger sex, whom they have been taught to look upon as their protectors. Shame, shame upon this dismal stain humanity incurs ! The vile, unbridled passions bring ruin, death ; or, worse than death, a lifetime of anguish and disgrace. The cause is plain ; the question is answered through the dark existing facts.

The seeds of corruption are early sown, and the harvest yields their kind.

The woman who has led a life of rigid economy, whose mind has been over-taxed through poverty, or the wife who is denied the means she requires to clothe and provide nutriment for her children, who at times is driven by this financial limitation to a desire to steal, and who may clandestinely take small coins from pockets not her own; and, from a frequent repetition of this, a disposition to steal will be kindled in the constitution of her child, should she be pregnant; and not being aware of the effects these acts will have. The training her child may get will fan the embryo flame, until, in after years, the fearful habit may become fixed, may grow and strengthen, until the end will be, as has been too often seen, the early sown seeds of dishonesty have terminated in felony. It is a sad and sickening thought that parents may, and too often do, plant in the embryo child the terrible causes which lead him or her, step by step, to the dark and gloomy prison cell, or to the scaffold. Yet that same child, under opposite circumstances, might have carried a spotless soul into eternity. The parents are more responsible than many care to allow.

When a wife, about to be a mother, through fear, or fancy, or adverse conditions, conceives the thought of murder to rid herself of this new charge which is soon to require more care, more food, and more clothing than her time or scanty means will afford ; or if some pleasant journey must be abandoned, or some anticipated pleasure forgone if this development is permitted to go on ; or if some confiding girl has trusted one she too greatly loved, far more, perhaps, than he loved her, and, as the serpent charms the bird through his strong, magnetic power, she has yielded her heart, her body, her virtue, and her peace of mind to add to his promised happiness, and finds at last that it was but lust, not love, which prompted him to rob her of what she had hitherto always held as more precious than her life, that is, her sanctity of sex, and her fidelity to virtue. If any such as these, on any pretext, are tempted to destroy this germ, this embryo, from the hour its existence was suspected, what result can be expected when every thought has been directed as to how to accomplish this fearful deed, either by excessive exercise, such as had been known to gain the end in view, by jumping, riding a trotting horse, drinking some draught prescribed by

friend or nurse, with the one single hope of an abortion. But if her plans are thwarted, although with that one wish at heart, she has continued her efforts to the time of birth, that child must bear the impress of her desire to kill; for every impulse of her mind and heart during its development was to interrupt the growth and to expel the fœtus. During business, in the social circle, through the day and night, and even with her prayers were mingled the wicked thoughts of fœticide; and the brain of the child will develop in the channels to which it is directed by the inclinations of the mother. Combativeness, destructiveness, and secretiveness must be prominent in such a case; while benevolence, conscientiousness, spirituality and reverence will be comparatively insignificant. Hence the child will early exhibit its natural propensities, a spiteful disposition, a tendency to cause suffering, and a pleasure in witnessing exhibitions of pain. It will catch flies, tear off their wings and legs, then rejoice in their apparent misery. It will bite, pinch, and break; and, when at school, will be noted as a wicked boy who fights. Still farther on in life, he will secure weapons of defence, but will be quite liable to use them

aggressively, and he will end at last where the laws of the land determine, in the penitentiary, or on the gallows.

Still, to the people of the world, all of this seems to be a mystery. Why that, from a parentage, seemingly so conscientious, inoffensive, and discreet, such a prodigy should emanate. But if the inner workings of the mind could be mirrored on the surface of the form, more charity would be extended to this unfortunate class, and justice could be meted out, not only to the perpetrator of the acknowledged crime, but also farther back to the source of sin from which the criminal sprang. And so on, from generation to generation, we may trace the line of cause and effect, and when more knowledge shall be gained, and more wisdom practised, crimes will lessen, and prisons may be transformed into institutions for education, and the gallows be numbered with the instruments and means of torture and death belonging to the dark ages of ignorance and superstition to which history points, and human nature shrinks with shame and terror to contemplate.

CHAPTER VIII.

LIMITATION OF OFFSPRING VERSUS ABORTION.

ALTHOUGH life is desirable, and “to multiply and replenish the earth” is a command of high authority, yet where there are causes sufficient to warrant a limitation of offspring it is well and commendable to put it into practice.

In the marriage relation, what is made lawful as a means to a wise end is too often converted into a license or an abused privilege, and many times this function is repeated far beyond what is practical and justifiable, and contrary to the desire or to the convenience of the circumstances of either parent; but it is the sequence of a temporary selfish gratification on the part of one or both of them. This indulgence, in consideration of the great importance of the result, should be sacrificed to prevent the bringing into the world of unwelcome children to perhaps loathe their origin and hate existence;

or to save the life of the mother and wife whose health is failing through the exhaustion attending the too frequent repetition of maternity, with its increasing cares and excessive toil, which cause life to become a burden ; and in cases where the children must suffer and pine from inherited disease, or where fathers are disabled through physical affliction or feeble mind, and cannot provide for wife and family, when all must perish from the want of life's necessities, or be cast upon the world to be fed by the hand of charity. Under such, or parallel circumstances, I am convinced that there should be an effort made to put a stop to these permitted privileges which lead to such fearful results and responsibilities; and human beings would not only be justified, but should be lawfully compelled to limit their unfortunate families, at least until more favorable conditions should warrant a further increase.

That copulation, whether in the animal kingdom or among the human species, naturally implies propagation, no one can reasonably deny ; and that, whether in health, or under the unfortunate condition of disease, or other equal disabilities, the marital indulgence, now much abused and over-rated as a physical

necessity, will not be immediately relinquished even by such as suffer most, however evil the results may be, any more than strong drink will be abandoned by its injured devotees, is equally certain. Then, until time and circumstances, with all the opportunities for education, can convince the mind and strengthen the will against the unreasonable and injurious indulgence in either of these habits, it is wise and beneficent for the protection of all parties concerned that there shall be means devised to reduce the amount of evil consequences by some modification of the causes; and, for this purpose, much has been said in favor of means to, at least, prevent an increase of the victims of unbridled passion. If there is any virtue in preventives, they should be encouraged in preference to the terrible sin of abortion, or destructive means of limitation.

To prevent conception is to prevent the union of the sperm cell of the male with the matured germ cell or ovum of the female; but the many difficulties lying in the way of a successful separation of these two forces in a natural coition, and the result of the application of the rules advocated, proves the various theories to be almost worthless, although some of them

claim the dignity of being based upon physiological principles, and bear upon their face the recommendation of plausibility ; but, when applied, they as often yield disappointment as success. The favourite theory of many physiologists that conception can be successfully prevented by an observance of the time of the exit of the ovum, and by avoiding intercourse until its final expulsion, which is supposed to take place somewhere within from one to fourteen days ; but the constitutional differences and many morbid conditions of the female sex renders the application of these rules almost, or quite unsuccessful. The passage of the ovum from the ovary differs so greatly in different subjects that there is no reliability as to the day when this shall take place. In some it may pass with the menses, while in others it will be three, six, twelve, or sixteen days after ; and many mothers can testify that even at a later date conception has occurred. And although there is a greater liability to conception during the first two weeks after menstruation than subsequently to that period, still, that it is possible at any period of the month cannot be doubted, as the frequent exceptions attest, and so render this theory positively unreliable. A

woman, in speaking of her misfortune in having a large family, said that after she had given birth to five children, she conferred with some one who she supposed to be wiser than herself, and was by them advised to desist from the marital relations until two weeks after the menstrual flow. This suggestion was listened to with interest, and was complied with faithfully; but with a result opposite to what she had hoped for; as, in less than a year, another child was born; and a repetition of this supposed prevention ended in a like result. So the disappointed woman had seven children from her efforts to have but five. And many others have passed through similar experiences. Under the given circumstances, it is difficult to determine the exact cause. Whether it is to be attributed to a detention of the ovum in its exit from the body until a much later date than is usual, or whether the retained spermatozoa maintains sufficient vitality to fecundate the ovum in its unusually early passage through the fallopian tubes. Which last is a reasonable proposition, as, in cases of animals, active, vibrating sperm cells have been discovered some days after the act of coition. So why may not the same conditions obtain in the

human female, to be followed by conception if the ovum should be lingering about the ovary, or in the fallopian tube, until a late date; or if it should precede the menses in its passage through? These variations in the escapement of the ovum render very uncertain what might otherwise be of considerable importance. And as the female germ is a microscopical object, it is difficult to be conscious of its existence or of its removal; particularly as there is often a complication from diseases of the vagina, accompanied by discharges.

The use of water in the vagina, by means of a syringe or douche, for the removal of the spermatozoa after coition, has been a favorite prescription as a preventive of conception, and one which has been adopted with about as little certainty as the first. If the douche of water effectually removed the sperm cells, it would, doubtless, prevent conception; but, if at the time of coition, the cells find immediate entrance into the os uteri, and from thence to the cervix, or neck, all the water that might be injected into the vagina would prove futile; for it would not interfere with the fecundating properties of the cells, and, in truth, it might serve as a tonic, and favor conception by its healthful

influence. Women have stated that their liability to pregnancy was much greater when they had resorted to the trial of the water treatment for the opposite effect. The introduction of water into the vagina is harmless, and, in many instances, advisable, as where there are diseased elements which would be absorbed if retained; the only danger is in a liability to contract cold from a thoughtless exposure of the person during the use of the enema.

The injections of medicated liquids would prove no more successful than clear water, if the sperm cells were beyond their influence; and if there should be an effort to thwart conception by an introduction of liquids into the uterus, the result would be most painful and hazardous, and the attempt should never be made.

A long list of equally unsuccessful plans have been devised by speculative, if not unprincipled, adventurers in this department of esoteric anthropology, a recital of which would be of no more value to the reader than the application of the same, as infallible preventions of pregnancy. It will be one day learned that the only proper, consistent and reliable prevention of offspring is, not to yield to the sexual

passion. Abortion or fœticide implies, on the part of the daring perpetrator, the causing of the destruction and death of the embryotic development; and not infrequently the life of the mother is implicated; yet this desperate practice is viewed with a calm complacency by many in all positions of life, as if it were a natural and harmless mode of limiting offspring. For the uncultured and thoughtless class, whose unfortunate lives have been so fraught with misery, that “by man’s inhumanity to man” they have lost all confidence in their kind, and through their dark, dreary, half-starved lives have had but little hope or faith in God, we might feel compassion and a sense of deep heartfelt pity when they are driven, as they suppose, to fœtal destruction to save them from an increase of wretchedness, and to spare the coming child such misery as they have long endured. And even then one could not agree that it was a necessity, nor scarcely grant excuses, but such are not the ones to seek refuge from their cares and poverty by fœticide. It is often in the higher walks of life, and among the more favored classes, that this mode of lessening human cares and of limiting families is a matter of cold determined will to

bend Nature's laws, and to break them to the extent of killing, to meet their conveniences, or that more means may be conferred on the number now at hand, or that more time may be devoted to the pleasures of life in gay society.

When the wife, suspicious of her condition, determines at once that she will relieve the womb of this self-entailed encumbrance, and either alone or encouraged by her husband, the father of her child, she willingly submits to the rash deed of fœticide, for which no one condemns her; whereas if she had waited six months longer, or perhaps but four, until the birth of her child, and had then thrust a dagger through its heart, she would have been pronounced a wicked murderess, guilty of infanticide. From civilized, christian countries missionaries are sent to distant lands to teach the heathen not to kill their children, where, from religious duty, as is supposed, to appease an angry god the babes are sacrificed in the sacred waters of the Ganges, or under the wheels of the car of Juggernaut; this is done through fear of the worshipped deity; while here, and in other christian lands, where church spires point towards heaven, and far-sounding bells almost

daily ring to call in the worshippers to listen to the word of God, civilized christian men and women allow their unborn children to be killed because they are unwilling to spare the time and means to care for them. Missionaries are needed to-day, even where the gospel has been taught for centuries, to teach the people of the awful responsibility that rests on them for deeds so daring and destructive.

When persons seek happiness in the pursuit of knowledge, and take pleasure in the application of the known laws of life, and prefer the exercise of the higher faculties of the mind, allowing at the same time to all of the natural functions of the body healthy play; then, instead of yielding up reason and will to the power of the lower passions and morbid appetites, it will not be difficult to hold them subservient while the higher faculties assert their rights and assume their just prerogative; and sexual continence will then be from choice, to give the vital forces opportunity to regain their wonted strength, and for the brain and nerves to be supplied with a richer quality of blood; for the muscles to develop, and the general system to recuperate and resume its more youthful buoyancy, which will add new

zest to life and fervor to the affections ; by this culture of the mind, the love of offspring, combined with a refined and increased conjugal affection, will become an incentive to the procreative act, instead of its being merely the sensuous gratification of an animal passion.

Let the conception be however unfavorable, and under whatever circumstances, the most humane and wise plan is to make the best of the conditions, and give the irresponsible creature a fair chance in the life it never sought ; love it, cherish it, and make of it the most that human nature can under adverse circumstances. This child, if properly loved into existence, may prove to be a blessing to the world. Cast no half-formed waifs upon eternity ; give all that are conceived a possibility of identity by favoring a full-time development, and a perfecting of all the parts and faculties. It is good to have an identity, a conscious existence, and every mortal should be so born as to be grateful to parents for existence. There is much to live for, and the most humble is an equal participant in God's great blessings of sunshine by day, the pale moon and starlit canopy of night, the mountains and valleys, the flowers, and all the

countless beauties of Nature are ours to enjoy ; and time on earth, at the longest, is but short, and to some it is a joy, while others have but little to make it bright ; but the eternities are open to all, and this glad hope may lighten the most cheerless soul, and raise it to feel and believe that when the cycles of time shall have ceased, its existence will not end, for the soul of man being an emanation from God, must return freighted with life's experiences to the Great First Cause ; and the wiser and better we have striven to make our life here upon earth, the more rapid and glorious will be our ascent.

CHAPTER IX.

PREPARATIONS FOR PARTURITION.

IN consideration of the great need for information among women in regard to this most interesting and natural function, we deem it of vital importance to the prospective mother that she become aware of the approach of labor, and that she understand something of the course to be pursued to make it as favorable as possible for both herself and her coming child, thus relieving her mind of much anxiety and fear, and favouring an easy birth and a rapid recovery.

From the time of quickening the development of the foetus continues, and the abdomen enlarges in proportion until about the middle of the last or ninth month, when there is a perceptible decrease in the size of the waist and abdomen; the mother feels less encumbered, and now enjoys a drive or a walk, which exercise would have been painful previous to this period;

she now moves with more agility, and usually manifests a more cheerful and happy disposition than has characterised the entire preceding months. She superintends her domestic affairs, and can perform physical labor with ease and pleasure, and very often she accomplishes more to prepare for her accouchement in the last fortnight of gestation than she has been able to perform in the same time since the commencement of pregnancy. The relief she experiences is from the contraction of the uterus upon the body of the fœtus; and from this period of passive contraction one might reasonably date the first symptoms of labor, although they are masked. However, about this time there are frequently pains in the back and abdomen, which alternate with moments, or hours, of ease, and these arousing suspicions of "true labor," the physician, midwife and lady attendants are often summoned, but without need, as they prove to be spurious or false labor pains, and may result from various causes, such as the fœtus having settled lower in the abdomen, and so becoming liable to press upon nerves previously unaffected; or from the accumulation of gas; or hardened fæces, through being obstructed, would result in frequent pains, which a few

drops of tincture of camphor, or essence of peppermint, or a mild purgative would entirely relieve. True labor is usually recognised by a regular periodicity of pains, which at the time cannot be referred to any other known cause, and with knowledge on the subject need not leave doubts. In many cases the pain is first noticed in the lower part of the back, this may suggest the probability of a strain, or lumbago; it is, however, as suddenly to cease as it was to occur, and is soon forgotten, but in from five to fifteen minutes the patient is reminded that the cause has not yet been removed, and consecutively these pains come and go with increased severity. But all subjects do not have pains in the back, in some they may be low in the abdomen, and after occurring there at intervals during a few hours, they may change their locality and become seated in the back. The relaxation of the neck and os uteri is the exciting cause of these early symptoms, which are properly called dilating pains, but from their peculiar characteristic they have also been denominated "grinding pains;" and as a proof of the reliability of these as symptoms of true labor, there will be discovered, in the course of a few

hours, a discharge, referred to by midwives as "the show," which consists of a thick, glairy mucus tinged with blood, and which falls from the dilated os uteri; when this appears, all doubts may be dispelled, and the necessary preparations should be made for the accouchement. Now, the midwife or physician should be summoned, also two female attendants, one of whom may be the nurse, or one who is competent to take her place if she cannot be present; and we should advise that the husband of the patient be present on this occasion, unless illness or some other disqualification should serve as a reasonable excuse for his absence. It is a mistake to exclude the husband from the parturient chamber, for who, except the patient herself, has a more vital interest in the case than the husband and prospective father? And no one can take the place of an affectionate companion under such trying circumstances. Often there is an irresistible desire to hold the hands of an attendant, or even to throw the arms about the waist of someone during the last and often agonising pains; who can more tenderly and more appropriately occupy this place? Or who will be more welcome to raise her head, to hold to her parched lips the cool,

refreshing draught, to fan her burning cheek, to smooth her brow, or to soothe her anxious mind and restless nerves than the husband? And the knowledge of his presence affords a comfort and a confidence which no other friend or attendant can give. We consider that it is unjust to debar a wife from the satisfaction which is derived from the presence and the gentle attentions of her husband; it is equally unfair to the husband to peremptorily exclude him from the opportunity of fulfilling his duty to his wife by adding to her comfort of mind and body by any kindnesses he can offer; and it is thoughtless, if not presumptuous, of the attendants, midwife, or doctor to oppose the suggestion of his presence. Some female attendants offer opposition to this natural prerogative of the husband on the grounds of modesty, saying that the presence of a man would almost, or quite unnerve them; and yet these same modest attendants are willing, and often seem really to enjoy the privilege of conversing with the officiating male physician: so one might reasonably conclude that the presence of the husband need not shock such persons more than that of the doctor.

A medical attendant is sometimes guilty of

denying the patient the natural right to have her husband present; but surely his modest would not be offered as a bar to justice where reason should always be the master! In consequence of this time-honoured, but no less improper custom of excluding husbands from the parturient chambers of the wives, but few men really know what suffering their wives experience during the birth of children, and therefore they cannot feel the same amount of tender sympathy which otherwise they would; and we here repeat, that if husbands generally were better informed upon these subjects, wives would suffer less, and, contrary to a popular but no less erroneous opinion, instead of such knowledge lessening respect for their companions, it would increase sympathy and regard. On these occasions husbands should not offer objections on the plea of delicacy, or of sympathetic suffering; these are the times above all others when bravery, chivalry, respect and tenderness should be manifested for the female sex. And here lies the husband's duty, plain and clear, and if he cannot assume the position to endure the greater suffering and the most severe, to willingly and joyfully accept the lesser portion and prove to the confiding

wife what she had in fancy held to be the characteristics of the stronger sex ; and, under such conditions, with these blessings, a wife will be made strong and ready to meet her fate, and to bear her child without complaint.

It is wise not to have more attendants present in the parturient chamber than are absolutely needed. If the case lingers, and one set requires rest, others may be accepted, or one attendant at a time may be released and another friend take her place. Care should be observed in regard to the amount and nature of the conversation of the attendants ; much loquacity in the lying-in room proves a great disturbance to some sensitive natures, and the interest manifested in discussions and narratives leads the patient to believe that she is being neglected. All gossip of the neighbourhood, and details of illness, death and deformities, of superstitious omens, and of what has been said and done by other women under similar circumstances should be forbidden, as should also the indulgence in jesting with each other, or with the patient, which is often very annoying, and the effect may be quite contrary to what is intended. For instead of the patient being cheered, she may become disgusted and

labor be retarded, the hours of pain prolonged, and nervous irritability increased; whereas a moderate amount of encouraging conversation will have a favorable effect, will serve to pass the time, and help the patient to bear the necessary suffering with greater fortitude.

The bed or couch upon which the patient is to lie should be arranged early, while she feels able to give instructions to her attendants as to where all necessary articles can be found, and while she does not need their entire time to be devoted to herself. As it is prudent to secure rest and quietude for the patient for several hours after her confinement, as a prevention of hæmorrhage or syncope, so every arrangement should be in accordance therewith; and, to avoid any effort on her part, or unnecessary exertion for the attendants, it is proper to have the bed made up as the patient will require after her delivery, which will necessitate a folded blanket or sheet being placed over the mattress for its protection, and over that a sheet may be spread, then a piece of mackintosh, or soft oilcloth, one or two yards square; and above this a blanket and a sheet folded into four thicknesses, upon which the patient is to lie; and after her confinement the

oilcloth, with the soiled blanket and sheet, can be drawn from under the hips without any undue disturbance. The amount of covering for the patient, both during and after labor, must be regulated by her own feelings, and by the temperature of the apartment; light, soft covering is most desirable; a sheet may be all that is required, and the temperature of the room should not exceed 60° (Fahrenheit).



CHAPTER X.

PARTURITION OR LABOR.

IN writing this chapter, it is not our intention that the suggestions herein given should supersede the necessity for a medical attendant or a professional midwife; but on the contrary, we strongly advocate, in all cases of confinement, the attendance of one or the other; and for many and sufficient reasons we advise the services of a female physician, or of a competent, educated midwife in preference to those of a male physician. The reasons why an attendant of the female sex should be preferred need scarcely be discussed, for it must be evident to every thinking individual that if a female is competent to officiate under such trying circumstances as attend the birth of a child, it must be the choice of a sensitive woman; for now, more than at any other time in her life, she requires perfect freedom of action and speech; now she needs to throw off

all restraint, and be free to assume any attitude conducive to comfort: and she will necessarily be more at ease in body and mind when surrounded by her chosen female friends, her husband, and a medical attendant of her own sex, than in the presence of a man-midwife, with perhaps no other acknowledged superior qualification over a woman than that of sex. If the birth proves to be a natural, ordinary one, any competent and experienced female friend might perform all the required duties of a regular physician or midwife; but inasmuch as no one can be certain that there will be no complications in the case to demand immediate and skilful attention, no woman should voluntarily discard professional attendance. If the necessities of the case require the introduction of the hand of the midwife into the vagina, or into the cavity of the womb, as in many instances, such as in turning of the child, or in placental adhesions, or in hour-glass contractions of the womb, in such cases no argument need be advanced in favor of the advantage of the smaller hand of the woman physician over that of the hand of the sterner sex in the execution of these duties. The size of the one pleads its adaptability, and the

strength of a woman's hand, when guided by knowledge, is quite sufficient; more force than she could apply would, under such circumstances, probably prove injurious to either the mother, or the child, or to both. If the competent, educated female attendant cannot be secured for the occasion, it is advisable to engage the services of a male physician rather than to subject the patient to the care of only inexperienced friends of her own sex on the plea of modesty, and so, perhaps, through mismanagement to sacrifice the life of her child if not her own life also, and her health and happiness for all future time. Therefore, neither from dread of the presence of the male physician, nor from motives of economy, should a female friend or neighbour be called to officiate in this responsible position, even if she sustains the reputation of being very clever, kind and generous.

For the sake of the life and welfare of those of the unfortunate class who sometimes give birth to children without due preparations having been made, who have lacked timely warning to secure the professional services of doctor or midwife, and whose lives might be jeopardised in the hands of inexperienced

friends or strangers who, though kind and willing, yet, from being uninformed as to what to do in such emergencies, are liable to become embarrassed or alarmed, and to leave the patient to her fate, or their misdirected efforts to save may be the means of death to both mother and child. For the benefit of such, some practical suggestions may be given as a guide to any woman who, if there be no serious complications, may be enabled to conduct the case successfully, and thereby prove the oft-repeated adage that "knowledge is power." There can be no reasonable doubt that all women should be sufficiently informed upon the subject of midwifery to be able to officiate in a case of ordinary labor, which, being a natural function, should be so accepted, instead of its being viewed with terror, as it is by some who, should they find themselves face to face with such a circumstance, would shirk with fear any responsibility which the emergencies of the case might offer, as if it were a dangerous, not to say disgraceful, position to occupy, when in truth it would be praiseworthy on their part if they were found able to occupy it; for all women should be so educated that they may assist one another in this, the crowning mission of their

sex—maternity—a function which, although natural, and under the normal conditions of health should be painless and free from danger, yet when occurring alone, and unaided by the skilled physician or by the kind hand of womanly sympathy, guided by wisdom, may prove a perilous ordeal.

An easy and favorable delivery depends much upon the healthy condition of the patient, therefore she should not only observe the rational means to preserve health throughout the entire period of gestation, but at this important crisis especial attention should be paid to the condition of the bowels, and to the circulation. Nature usually points out the right course to pursue, and for twenty-four hours previous to the consciousness of labor the bowels become relaxed, and the system greatly relieved; if this has not occurred, as soon as the symptoms of labor appear, it is the duty of the physician or nurse to advise a full warm water enema, with the intention of unloading the rectum, which will facilitate the descent of the fœtus.

Next, to avoid a determination of blood to the head, which might prove unfavorable, and to lessen the probability of puer-

peral convulsions, immediately after the effect of the enema has passed, it is advisable for the patient to indulge in a sitz bath as warm as she can bear it, from 85° to 90° , with a foot-bath of a still higher temperature, 100° , or as hot as can be endured; both of these baths may be continued from fifteen to twenty minutes, and during that time a cold, wet cloth, may be placed over the top of the head and forehead, and frequently repeated. This gentle course of water treatment is most conducive to the comfort of the patient, it quiets the nerves, and assists nature in the performance of relaxation, and by giving tone to the uterus enables it to carry on the great work of expulsion, and from it no evil results can possibly arise. During the bath, moderate draughts of cold water, or, at the option of the patient, of hot water or weak tea may be indulged in; her own feelings will usually be the guide, but the attendant may suggest any one, or all, and the patient will decide which she prefers. The object of these draughts is to prevent a feeling of faintness; the cold water is a tonic, and invigorating, while the warm drinks stimulate the system in a gentle manner to a more heroic action. After the patient has been assisted

from the bath, and the surface thoroughly dried with towels, she may resume a portion of her ordinary clothing, including a loose wrapper if she is disposed to sit up, or to walk about the room, otherwise she may be prepared to lie upon her couch or bed with nightdress and loose wraps only. No particular restraint need be put upon the movements of the patient; if she wishes to walk, to sit, or to lie, she should not be deterred, for motion of the body, and gentle exercise or change of position facilitate the progress of labor; and if she should be disinclined to walk she may be advantageously encouraged to do so until her pains approach the more severe form. It is a great mistake to force the lying-in woman to occupy one side or the other, she is at liberty to lie as she feels most comfortable, either upon her right or left side, and at times upon her back with her shoulders propped, and her feet drawn up; nurses and even midwives are sometimes provokingly rigid in their commands about position. If the patient wishes to rest upon her knees for a time, it is likewise her privilege to do so, and if the child is born while she is in that attitude, no harm need be apprehended if all parties concerned understand their duty.

Nature dictates positions, and a parturient woman follows her natural instincts to a wonderful degree.

If labor should be tedious, and the relaxation of the mouth of the womb slow in comparison with the number of pains, much can be done by the means of hot, wet towels, which may be applied to the lower part of the abdomen and over the genital organs ; they should be repeated as often as every fifteen minutes or half hour, and they should be as hot as the patient can bear them. After the character of the pains has become more propulsive or forcing, this same course of treatment may be continued, with hot fomentations if they are agreeable to the patient; if not, they should be discontinued, and, in addition, throughout labor she may be encouraged to drink freely of hot water slightly medicated with capsicum (cayenne pepper); this drink should not be so hot with pepper as to be painful to the mouth and throat, and to soften the effect to those parts sugar may be added to suit the taste.

Under all ordinary circumstances the above treatment is all that will be required, except to meet the natural wants of the patient as she will suggest. It is a great relief to the majority

of women during the propulsive pains to hold their hands, or to give them the opportunity of holding the hands of the husband or of some strong attendant, or of grasping some object firmly, to raise themselves up by it. If the attendants are few, a substitute for hands to hold can be devised by slipping a sheet under the foot-board of the bed, or round the foot-post, and by tying the ends into a firm knot, an unyielding, yet soft support is formed to draw upon, which may serve a better purpose than the warm, moist hands of any person.

If the pains in the back continue, with increasing severity, much comfort can be secured by a gentle, firm pressure on the back, over the region of, and during the continuance of the pains. This pressure must be guarded, that the hard bones of the hand do not bruise the back; and after it has been continued for several hours the inconvenience of position, and the fatigue of the attendant, might suggest the change for the patient, of sitting back of her upon the bed, and, with the shoe removed, the soft sole of the foot might be gently, but firmly pressed against the back during each pain; this will prove very beneficial, and more comfortable for both patient and attendant.

When labor lingers for many hours without effect, and the parts fail to yield correspondingly with the frequency of the pains, a course should be adopted to aid nature by overcoming the rigidity of the os uteri, and to increase the lubrication of the vagina, for which purpose small doses of tincture of lobelia will be found very efficacious, and may be prepared as follows :—Add one drachm or a teaspoonful of the drug to a gill of water, and give one teaspoonful every half hour until nausea is experienced, then it may be discontinued or given at greater intervals. As the stomach becomes sensitive to its effect, and nausea or slight vomiting occurs, the mouth of the womb and the orifice of the vagina yield to its relaxing influence, and as the lower portion of the womb relaxes the muscular fibres of the fundus or higher part will contract with greater force, and the expulsive efforts will be correspondingly increased, and, the energy of the patient being encouraged by the efficiency of the pains, labor will proceed favorably. We have also found much benefit to be derived from one grain of tartar emetic dissolved in a gill of water, and given in teaspoonful doses every half hour, until its relaxing influence is observed through the symptoms of nausea it will produce.

This will be quite sure to produce the desired effect in cases where lobelia might fail. In connection with either of the above-mentioned prescriptions, it is always well to encourage the use of the warm capsicum tea at intervals of from one to two hours, the effect of which will be to gently stimulate the energy of the system and to divert the blood from the brain to the stomach ; it also acts mechanically by filling the stomach, which, by its pressure upon the womb, excites contractions. If there is a tendency to vomit after the use of these drugs they may be discontinued, and warm capsicum or weak table tea be used in moderation until the expulsion of the foetus.

The course here prescribed may be most beneficially pursued by any intelligent midwife without the least danger of evil consequences, and by its means much suffering might be avoided, and it would perhaps even result in the saving of many valuable lives ; while the use of ergot and other menagogues often proves disastrous, as from the irresistible effects of their forcing efforts upon the womb the life of the child is endangered, and the mother for ever after subjected to inconvenience and much suffering through laceration of the womb, or rup-

ture of the peritoneum or the soft parts lying between the vagina and the anus, all of which should be strenuously avoided, as well as the evil results of instrumental labor, which seldom proves to be necessary, except in serious complications demanding immediate delivery, if the rules herein suggested are carefully applied.

To assist the natural efforts of the system should be the great object in view. To act with Nature step by step is the duty of the midwife or medical attendant, and knowing what is required on the maternal side for the safe, but not too speedy, delivery; all should be done to that effect. During this period nothing should detract from his or her interest in the case, no other business should interfere, no other subject should now supersede this in the mind of the one upon whom the lives of two human beings, and the happiness or misery of a devoted husband and family, must depend.

During the last expulsive pains, as the head of the fœtus is pressing hard upon the lower walls of the vagina, there is a probability of lacerating the peritoneum; then, for protection, the hand of the attendant, lubricated with olive oil, or still better, with warm boiled starch,

should be gently pressed upon the part to slightly counteract the force which otherwise would be sufficient to rupture the anterior margin of the peritoneum, which becomes so greatly distended as to be scarcely thicker than a piece of cambric. However, in this very important precaution against what might prove a lifetime source of trouble, if the tear should be so great as to involve the sphincter muscle of the anus, and thereby to open a communication between the vagina and the rectum, much care must be exercised not to exert any appreciable force by the hand, so as to retard delivery, but to gently aid the passage of the head by following the natural course it takes from the back to the front ; and as the occiput or back of the head turns up towards the pubic bones, the face sweeps down this thin inclined plane, and with a little assistance from the attendant's hand may escape and leave the parts unharmed. At this period of delivery there is generally a few moments of complete rest, as the uterus has become partially emptied of its contents, greatly through the action of the diaphragm and abdominal muscles, and its walls must contract to correspond with the remaining contents, to gain sufficient force to

perform its part in the complete expulsion of the body of the child. Nature has kindly bestowed upon the mother these moments of rest, by which strength and energy may be restored to equal them for the task required. During this interval there is no cause for alarm, because one hard pain does not continuously follow another. At this important juncture the attendant should observe quiet; the patient is in no state of mind and body to endure the least noise or annoyance; a moment of forgetfulness in sleep would be to her most invigorating and refreshing. During this lull in the pains, when the child lies quiet in the birth, with head expelled, there is much danger of strangulation, by either the contraction of the relieved anterior border of the peritoneum upon the throat, or by the umbilical cord being wound sometimes once or twice about the neck, which circumstance may cause the death of the child in one of the two following ways:—If it has breathed, which will be proved (if in no other way) by the usual cry as the face comes in contact with the surrounding atmosphere, and may be said to be a very favorable indication of the child's well-being; but now, either the enveloping umbilical cord, or the flesh of the

mother may, without protection, press so closely on the throat as to cause suffocation ; or if this outcry is not heard and the child has not been observed to breathe, but must yet depend upon the maternal circulation for its existence, the pressure upon the cord by the neck of the child upon one side, and by the peritoneum of the mother upon the other side, will so interrupt the passage of the circulating blood through the cord as to cause the child to perish ; consequently, attention must be directed to either of these conditions, and by the gentle manipulations of the hand of the attendant, the first-mentioned exigency may be overcome by slipping the moistened index finger between the neck and the now cord-like edge of the peritoneum, and bearing it from the throat, at the same time admitting air to the face of the child, without exposing the mother to any draught or to the surrounding chilly atmosphere. And the second embarrassment may be overcome without much difficulty, by the vigilant and thoughtful attendant, who, upon the discovery, should slip the finger under the cord at the back of the neck, with one hand press the head of the child slightly to the front, and, without undue tension or pressure upon the cord, lift it

from the neck and gently carry it over the head. If it should be coiled twice about the neck, it may be removed the second time as the first, and protected from pressure until respiration is established, or until the uterus resumes its action ; and when with one or two pains labor will have progressed as far as the birth of the child, and during the passage of the body through the lower straits of the pelvis, which is usually a rapid process, it can be advantageously held and guided to correspond with its natural movements, without force or restraint ; which attention enables the attendant to protect the face from coming in contact with the coverings of the mother, or from being immersed in the accumulating discharge, either of which might prove disastrous by a process of smothering.

The entire time, from the expulsion of the head to the birth of the whole body, is usually not over five minutes, or so much as is required to write all these details. Yet in that short time important results are at stake, which are pivoted upon the course pursued ; in the one case, where genuine kindness and self-possession are combined with knowledge, reasonable judgment, and womanly instinct, all may be

conducted to a favorable issue ; while in another case, where the conditions are adverse, the whole process is fraught not only with pain of body, but with anxiety, fear, and mental anguish, if not with death.

CHAPTER XI.

DUTIES TO THE PATIENT.

MANY cases of disease which are found among the women of the present day may be justly traced to the want of proper attention, or to other unfavorable circumstances, during the month or six weeks following their confinement; and it is to the duties of the nurse during this important period and the watchful care required from friends from the day of delivery to the end of this, the usual time needed for recovery, that our attention will now be directed.

When, through the expulsive efforts of the womb, the child is born, and has proved its independent existence by the lusty scream which it usually gives as evidence of its vitality, the umbilical cord should be securely tied, by a strong piece of double and twisted silk or thread, about two and a half inches from the abdomen of the child, and the thread should

be drawn so tightly that the inner walls of the vessels composing the cord will close against any possibility of the passage of blood from the body of the child ; then, with shears or scissors, the umbilical cord must be cut. This cord has, throughout gestation, conveyed the blood from the mother to the fœtus, then back again to her for purification and replenishment of nutritious elements ; but now that the child has the use of its digestive organs and of its lungs, it can supply its own blood with nourishment and atmospheric air, therefore this connecting link between it and the mother may be severed. And to prevent the accidental removal of the thread, as the end of the cord shrinks through being emptied of blood, the incision should be made not less than one inch beyond the ligature towards the maternal side. In the past it was recommended, and is still by many authorities of the present day, but without sufficient reason, to apply two ligatures to the umbilical cord, with a space of about two inches between, and the cord to be severed in the middle of this space ; but instead of any advantage accruing from this method, it has been discovered by modern accoucheurs to be really objectionable, as the end in view, the protec-

tion of the mother, is not secured, and it proves a detriment to the completion of delivery by retarding the expulsion of the placenta, or afterbirth; for when the cord is left free of a ligature the maternal ends of the open vessels permit the placenta to rid itself of what would otherwise be stagnant blood, by which means the uterus is stimulated to contract and thereby to expel the afterbirth with more force and at the same time with less danger of hæmorrhage from the womb. The second ligature is also applied by its advocates on the plea of neatness, as the flowing blood from the severed ends soils the surroundings, but this objection to the omission of the ligature is more than overcome by the real benefit resulting to the patient, as years of extensive experience in obstetrical practice by some of the most eminent and successful physicians of the present day have proved.

After the removal of the child it should be enveloped in a piece of soft flannel or in a shawl, with sufficient access of air to its face to carry on the new function of respiration; then it should be laid aside in a warm, comfortable spot, and permitted to remain undisturbed, so as to become somewhat initi-

ated into the new sphere of existence, while attention is being directed to the mother, and to the removal of the afterbirth, if this has already been expelled from the womb; if not, after two hours waiting for that event, it will be quite proper for the attendant to place the hand over the lower part of the abdomen of the mother, and then to gently press and knead until a ball-like substance, which is the contracting uterus, forms under the hand. By these manipulations the placenta will be pressed upon by the walls of the uterus, and will be expelled into the vagina, from which, if it is not involuntarily removed, its removal may be easily accomplished by the attendant, who should hold the loosened end of the cord in the left hand, and with the other hand trace the cord to the mouth of the vagina, from which the placenta is to be removed with gentle tension; then the thumb and index finger of the right hand may grasp and draw it away, care being taken not to draw upon the cord so forcibly as to sever it from the afterbirth, for then the task of removal would be more difficult, as the cord serves to direct the hand to the object of search. Great care should also be observed that all the membranes which

had enveloped the foetus are drawn away, and that there has been no part left in the womb, this can be decided by an inspection of the substance expelled, which should present the appearance of a lobulated mass of vessels held together by a thin, friable structure, uneven, yet unbroken. This, when removed, may be disposed of as best suits the convenience of the persons concerned; it may be buried or burned. There are superstitious notions entertained by some that if the placenta is burned it augurs of good luck, that the mother will be free from "after-pains," and the baby exempt from colic, which high recommendation would prompt many a credulous, kind-hearted nurse to adopt cremation for its disposal.

The separation of the placenta from the lining membrane of the uterus is generally accompanied by a considerable quantity of sanguineous discharge, varying in amount in different subjects, and at different births, from a pint to a quart, and in some cases even more; and in this discharge will often be found large pieces of coagula from the size of a hen's egg to three times the dimensions of that. This amount of both liquid and solid need cause no alarm, but to prevent an exhausting discharge

from the relieved surface of the womb, it is always advisable to continue the abdominal manipulations at intervals, with gentle, but firm pressure upon the ball-like form of the uterus, which will the more rapidly contract and close itself against evil results. And to aid in this effect, the patient may be advised to drink moderate draughts of fresh, cold water, which will also be grateful and refreshing, and much better for her system than any of the popular stimulants now too freely given, and the deleterious after effects of which will far exceed the present hoped-for benefit, while cold water in moderation can do no possible harm subsequently, and at the time of taking it is useful to the end in view. If, regardless of these preventive means, the flow continues to be profuse, and the patient is threatened with exhaustion, it will not only be quite safe, but most beneficial, to apply over the lower portion of the abdomen light, soft compresses, to be wrung from cold water in which, for the sake of the shock to the uterus to excite its greater contraction, pieces of ice may with propriety be placed ; and the compresses should be renewed as soon as they become warm on the body. More benefit will be gained from this treatment if there

should be an interval of a few moments between each application ; and there should always be a dry compress laid over the wet one to protect the clothing or the bed covering. Small pieces of ice may be given to the patient to swallow after they have melted in her mouth.

When there is no further need for repeating the cold compresses, a closely fitting bandage, from eight to ten inches deep, with gores to fit the hips, should be placed about the abdomen, and be there confined by nursery pins ; the lower edge of the bandage should embrace the hips, and reach to the pubic bones in front ; and this part must be drawn more snugly than the upper edge. To the lower part menstrual protectors or napkins can be attached, for convenience and cleanliness. The lying-in bandage should never be neglected, although by some physicians it has been denounced as unnecessary and even harmful ; but the harmfulness arises from the improper shape, and from the manner in which the band is adjusted ; and truly, the long, wide, straight band, usually adopted, is a mischievous appliance, for invariably it is found, in a few moments after its adjustment, quite above the umbilicus, if not up to the patient's waist, and through this

improper pressure much harm would arise. But because evil has arisen from what did not fit, and was wrongly applied, is no argument against the use of an article properly made and adjusted, when both reason and experience favor it; and no one can doubt the comfort and support afforded by such an appliance, when the facts of the case are duly considered, that after from eight to ten pounds of substance have been recently expelled, and the greatly distended abdomen has suddenly collapsed, thus permitting the relaxed walls to sway to and fro with every movement of the patient. Also, after the patient has resumed her usual exercise, for three months a nicely fitting abdominal band would serve as a defence against falling of the womb; for this purpose there is nothing better than the band referred to in a preceding chapter.

From the earliest period after labor is consummated, in fact as early as is practicable, the patient should have refreshment. Nothing now should be given hot, or very warm; a bowl of gruel, or toast and sweetened water, with a little seasoning of nutmeg, or a piece of bread thinly spread with butter, and a cup of weak tea, or any light food that suits her fancy, and,

as was said, avoiding stimulants, except in great exhaustion, when a little port or sherry might be added to the toast and water, but even this we do not recommend. After the nourishment a time of rest should be allowed, with due attention from the nurse to the amount of discharge, which she can decide upon by proper inspection, for sometimes danger is delayed, and when from fatigue and believing there to be no need for their further assistance, all attendants leave the room to regale themselves with food or sleep, and upon their return they may find that very unfavorable symptoms have manifested themselves; therefore the patient, who in this feeble state is almost as helpless as the infant by her side, should not be permitted to be left without some responsible attendant for several hours after her accouchement.

After the patient has had rest, it will add greatly to her comfort to have the wet blankets drawn from under her, and after the necessary bathing in warm water to remove the accumulated discharges from her hips and body, she should be dried and comfortably "put to bed." During these operations she must not be allowed the liberty to exert herself; she must

not sit up, or move her body in the least beyond what it is impossible to avoid; and then she should remain quiet and undisturbed, free from conversation, or the cares attending her child or house. Now sleep, rest, and food, with other necessary attentions, will do more to restore her than stimulants, or drugs of any sort.

That the mother should nourish the child is in accordance with Nature, and that this should be practised on all occasions, except when illness on her part or some disability on the part of the child positively forbid it, is not to be doubted; consequently, the duty of giving the infant an opportunity to nurse must not be delayed. The early removal of the secretions, and the frequent application of the child will induce a more generous flow of milk, and will be to the personal benefit of the mother.

That the mammary glands should be brought into activity, and thus maintained for several months, is quite certain for the welfare of the patient, as during the period of lactation the uterus has a time of rest from the menstrual function, and thereby regains its wonted strength and energy after the period of pregnancy and parturition. Before the infant is

applied, the nurse should wash off the perspiration from the mammary glands, and this precaution is valuable through the early months for the health of both mother and child, and particularly in preventing sore nipples and susceptibility to cold.

If "after pains" become an annoyance, the application of hot flannel, or steamed hops over the abdomen will be found beneficial, or a draught of warm hop tea. These pains are the accompaniments of uterine contraction, and are not so dangerous as they are disturbing symptoms. Hot bran in a bag laid over the abdomen is also useful in relieving them, and drugs might be advised, but when the pains are sufficiently severe or continuous to require other than simple remedies, it is best to consult a physician.

The coming of the milk is often accompanied by a slight fever, which may have been preceded by a perceptible chill, but it usually passes off when the secretion is established. To prevent a feverish reaction of the system, the mother should be bathed all over every day with tepid water, by the means of a sponge or soft towel, under the bed covering, and to compensate for the necessary inactivity of her muscles con-

siderable friction should follow the sponge bath, with a moderately coarse towel, or the hand of the nurse. A gill of vinegar to two quarts of tepid water makes a very good application to remove from the flesh soreness caused by the protracted exertion during labor, and the vinegar is very efficacious in protecting the patient from sensitiveness to cold. Plain, simple food should be provided for the patient; bread and butter, oatmeal porridge, baked potatoes, baked and stewed apples, boiled rice, mutton broth, chicken broth with bread, and weak tea. Very little meat should be indulged in for quite two weeks, and no alcoholic stimulants whatever.

The bowels should be daily relieved either by an enema, by the free use of figs, or by a tablespoonful of wheat bran scalded in a teacupful of hot water, and taken in the morning before breakfast; and if they will not yield to these simple remedies, a light dose of physic may be administered, such as a teaspoonful of confection of senna once a day, or rhubarb pills.

During the process of recovery, after the first two weeks from the time of delivery, tepid sitz baths of from five to ten minutes are of

great benefit; during the time of sitting in the water, the body should be well covered to protect it from cool air; and while the body and limbs are being dried, the patient should lie upon the bed or couch instead of standing, to avoid a descent of the womb. Vaginal enemata will be useful to tone the parts, and they should be given while in the recumbent state, by the means of a glass female syringe, or one of the same construction made of vulcanite, which is more durable, and less liable to be broken by a fall or blow. For the injection, either water, linseed mucilage, cold black tea, or one teaspoonful of salt in a pint of water will usually be sufficient, but if there should be vaginal inflammation, or an indication of ulceration of the mouth of the womb, an infusion of witch-hazel or goldenseal should be used. Attention should be given to any consequent injury of the vaginal orifice, whether slight or grave, and to prevent excoriation from the contact of the lochial discharges, olive or castor oil should be applied after each local washing, or as often as three times a day; or if the flesh is torn and becomes swollen and painful, warm poultices of pulverised slippery elm, or of bread and milk, with oil over the surface, may be

applied ; when these have fulfilled their design, a mild ointment or “ cold cream ” may take their place.

During the first two weeks after confinement, company should be excluded from the patient's room, only the attendants and members of the family being admitted. Many a case of recovery is retarded by the excitement and fatigue caused by the numerous calls and the prolonged visits of friends ; and during these two weeks the patient should not sit up, nor attempt to lift her child from one side of the bed to the other, nor in any way exert herself until the uterus has had time to contract to its normal size. And when she does arise she must be exceedingly cautious in every movement she makes, and avoid standing ; she must be patient, and not try to compete with her lady friends in her activity, but give Nature a chance to restore the overstrained ligaments and tissues before she puts them to the test ; repose now will be most valuable towards securing health. After the patient is able to leave her room, and to assume her accustomed position in the family circle, she should decline to go into general society, to receive visitors, or to undertake anything which will risk the overtaxing of her strength. The

ligaments cannot acquire sufficient power to support the weight of the uterus under from six weeks to two months, except under the most favorable circumstances, and during this time all should be done with a view to the protection of these relaxed organs to warrant coming health and ability. With these precautions strength will be restored, and renewed health will be the reward for the vigilance and care observed; while, if the opposite course were pursued, the terrible penalty of protracted illness and disability might be the unfortunate result. It is greatly owing to the neglect of these sanitary rules that we have to-day so many cases of uterine disease, and feeble wives and mothers, to whom life has lost many of its former charms, and to whom health would be a greater boon, and bring more joy and happiness, than ever wealth can yield.

CHAPTER XII.

DUTIES TO THE INFANT.

DURING the time that the mother claims the especial care of the attendants, the new-born child must not be neglected, for there is danger of hæmorrhage from the funis, or severed umbilical cord, if the ligature should have become loosened by the shrinking of the cord, and the child might perish; so if there are any indications of such a misfortune pending, a new ligature must be applied at the back of the first one; and it is under such circumstances that one sees the need of sufficient length of cord by which this may be performed without injury to the abdomen; or respiration may be defective and require attention; consequently, until the nurse or a female attendant finds it convenient to wash and dress the little one, at intervals someone should thoughtfully examine its condition. It is not an unusual circumstance to find the

body of the child covered with a white sebaceous substance having the appearance of a thin coat of soft tallow ; or, if the back and general surface should be free, it will generally be found under the arms, in the groins, in the folds of the skin, and more or less upon the head ; for the removal of this, olive oil should be freely applied by the means of a piece of soft flannel, after which the body should be thoroughly washed with warm water and fine toilet soap, then rinsed and wiped dry. Great care should be observed to thoroughly clean all parts, the folds about the genitals, ears, eyelids, the creases in the neck, and the head, to prevent any irritation or abrasion which would attend neglect of this duty.

After the first thorough ablution, and the infant is temporarily covered with a soft warm flannel, especial attention should be given to the head ; when it has been cleansed as well as oil, soap and water can effect, a clean, fine comb may be cautiously drawn over the surface of the top to remove any remaining particles of the sebaceous substance which, if left to dry would be much more difficult to remove, and would prove the cause of future suffering from scales and inflammation, and from it might

arise *tenea capitus*, or “scald head ;” or if not this, the dark, closely adhering scurf is most objectionable, if only from the loathsome appearance it presents. If the weather is cold, the nurse should wash the child upon her lap before the fire, with the flannel wrap about the body, and during the ablution expose only the part which she is cleansing, keeping all the other parts protected from the air. All the necessary articles for washing and dressing the child should be near at hand, to prevent delay, or danger from cold.

It is the duty of the physician or midwife to superintend the dressing of the navel ; but if neither should be present, the nurse for the occasion must assume the responsibility, and before the garments are placed upon the child, except the diaper and shirt, there should be prepared a piece of soft, old linen, about eight inches long by five wide, and folded into two thicknesses, with a small circular piece an inch in diameter cut from the centre, then the folded linen should be laid on the abdomen, with the *funis* or cord slipped through the opening and turned up towards the face of the child, with the two thicknesses of the linen between it and the surface of the abdomen, then the linen

folded over it, and the band applied (to retain the cloth and the cord in place) and fastened about the body with nursery pins, after which the dressing of the child may be finished. For cold weather, a soft flannel shirt, or a knitted vest would be proper, and it should reach from the neck to the hips. Flannel would be suitable at almost any season, unless the temperature were exceedingly high, in which case linen or cotton would be better. The pinning blanket, petticoats, and dress should next be adjusted ; all must be well-aired and warm, and all put loosely about the child. None of the bands or waists should fit so closely that the fingers cannot pass freely between them and the surface of the body ; and all the clothing should be fastened by strings, buttons, or nursery pins. Stockings should be adjusted to protect the limbs when it is required to lift the garments. Then over all should be placed the warm, soft, double gown, to wrap the little one in a comfortable manner. Babies need warmth, and any exposure during the changing of clothes, or bathing, may cause them to suffer pain in the stomach or intestines ; or the head and throat may be the most sensitive parts, and catarrh and bronchitis result ; whereas due precaution

might have prevented suffering, disquietude, and perhaps death. But on the other hand, the child should not be kept in a condition of perspiration during either the day or night. The first duties to the child are not complete until the mouth has been thoroughly washed by the means of a fine piece of linen wrapped over the finger, dipped into cold or tepid water, and applied to the mouth, gums, and inner surface of the cheeks, after which a teaspoonful of cold water will usually be taken with apparent relish. This process is a good preventive of thrush, or "baby's sore mouth," and it should be repeated every morning as a very important part of the infant's toilet; also the ablutions, with especial attention to the head; perfect cleanliness, with strict care given to all the folds and creases of the skin, will prevent the painful excoriations and abrasions from which many children suffer. Unless through death or disease it is impossible, the infant should be nourished by the natural food the mother yields. After a few hours' rest for her, when there is a demand upon its part for food, there should be an opportunity given for it to nurse. The quantity of milk is often so limited that some nurses think it quite useless

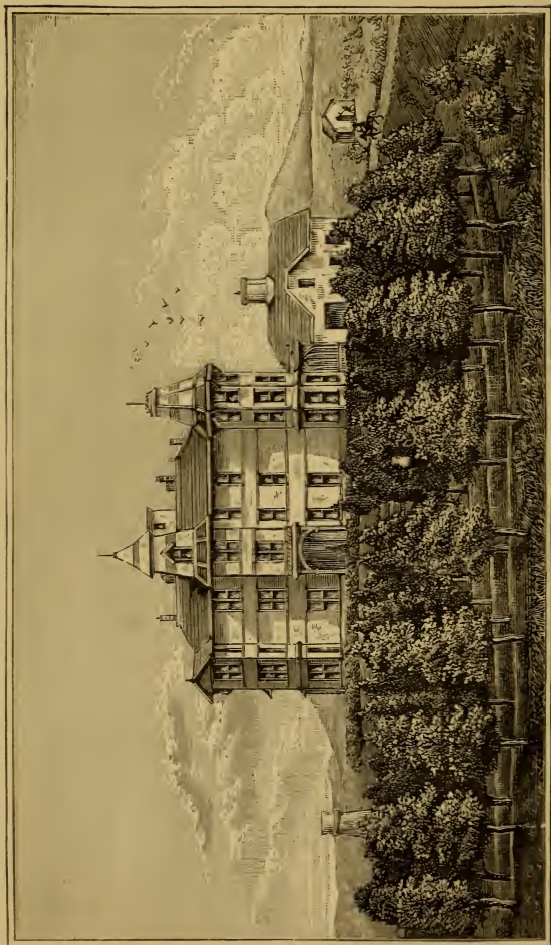
to the child, they therefore neglect to give the little one a chance to exercise the natural instinct of drawing, and after having had food from a spoon it refuses to apply itself; and for this reason, and others quite as trifling, the operation is abandoned, and artificial food becomes the general diet. From this cause many infants are attacked by intestinal disease, and are sacrificed. If the milk is so scanty that more food is required, a preparation of one tablespoonful of pure new milk, and two of hot water, slightly sweetened, may be given until lactation is established, which is usually after the third day, when the secretion will generally be abundant; but because the milk and water is allowed, the effort to nurse must not be omitted. The first secretions from the mammary glands serve both as nourishment and as physic, and will be all the medicine the infant will require to arouse the free action of the bowels to carry off the accumulated dark, waxy secretion called the meconium, which, if retained long after birth, will engender disease; but it is usually purged off by these first mammary secretions, the early removal of which also affords relief to the mother, and facilitates the influx of the proper nourishment, which is far

superior to the various compounds and chemicals thrown upon the market as substitutes. The function of lactation should be conscientiously practised from nine to twelve months, or until dentition qualifies the child to partake of semi-solid food. The growing popularity of the weaning of children in a few weeks, or of not nursing them at all, is a cruel violation of a law which must rebound upon mother and child, in a greater or less degree, to the detriment of both.

Regular habits should be instituted in the case of infants, with regard to their food, sleep, and bathing, as well as their evacuations. The food should not be given oftener than once in two or three hours, and the bath should not be allowed immediately after taking food, but about an hour before the stomach is entirely empty, while it is in a comfortable condition ; then the child will tolerate the bath, and really seem to enjoy it. After this operation is over, food may soon be given, when, from the exertion of the bath and the effect of the food, a quiet refreshing sleep will be experienced. This course may be successfully carried on for months, and with proper attention to the intestinal and urinary evacuations, and undisturbed

sleep, the infant will thrive and grow, and be a healthy, happy child. As much care should be devoted to the order and to the systematic arrangement of all the accessories of this little new comer as one would devote to those of a distinguished guest, and the result will be far more satisfactory in the case of the former than in that of the latter, for with the child the fruits of a rational course of training will be, good health, a happy disposition, and a comfort in their offspring, which will yield the parents more joy and happiness than are to be derived from the pleasures of the social world.

Italy of America.



ARTH. SELL, & ASSOCIATES,

ENGRAYERS

DR. ANNA M LONGSHORE-POTTS' MEDICAL INSTITUTE AND SANITARIUM.
NATIONAL CITY, SAN DIEGO, CALIFORNIA, U.S.A

✧ ITALY OF AMERICA. ✧

NATIONAL CITY, SAN DIEGO, is situated on San Diego Bay, 600 miles south of San Francisco, and is accessible by ocean and by rail.

The climate of Southern California is not excelled in any part of the world. In this belt, five miles back from the coast, the mercury never falls below 45° Fahrenheit, while during the hottest summer day it has never been known to rise above 96°. From May to November no rain falls. During the winter months there are frequent showers, and, at times, hard rain; but even then there are days and weeks of sunshine which make winter a welcome, pleasant season. And now the whole country—mountains, hills and valleys are covered with a velvety, green carpeting, dotted and decked with beautiful wild flowers of every color, which are by Nature so arranged as to outvie the finest works of art. Patches of purple, blue and yellow, and fields of scarlet and gold; while in the cultivated districts are groves of orange trees; whose dark, shining foliage never fades, and whose branches are always laden with golden fruit, ripe and delicious, at the same time green oranges and sweet-scented blossoms add to their

beauty, and fill the air with delightful fragrance. Olive groves beautify and enrich the country, while the palm and other ornamental trees make the scene most picturesque. Apples, pears, peaches, plums, and all varieties of delicious grapes flourish in this district. The whole year round strawberries are raised in the open gardens, and fire for warmth is seldom needed in this genial clime. This locality of itself is a natural Sanitarium. Persons suffering from catarrh or affections of the throat, lungs, and kidneys, even to a serious degree, may find refuge here with hope of cure, and after a few months' residence will many times regain robust health in the salubrious atmosphere of this most favoured portion of the world.

The table lands, foot hills and mountains, back of San Diego, abound in game. There are quails by the million, cotton-tail rabbits, jack-rabbits and squirrels, wild ducks and geese in great abundance ; while further back, on the precipitous mountain peaks and in the dark ravines, the lover of a sterner sport can find the California lion, wild cat, and grizzly bear. The bay affords unlimited opportunity for both sea and rod fishing.

The Institute and Sanitarium, a sketch of which is seen upon another page, is a "resort" for invalids who desire medical treatment, combined with superior climatic conditions, or for persons who wish to maintain their health, and desire the advantages of hygienic food and other sanitary influences, with the educational opportunities this institution affords.

An extract from a California paper, in a report given of a visit to San Diego by the writer, says : " The Sanitarium of Mrs. A. M. Longshore Potts is one of the most beautiful places in the country. The main building occupies an

elevated site, commanding a magnificent view of Table Mountain, in Mexico, to the south ; the Pacific, dotted with the Catilina Islands, in front, and the snow-capped Sierras to the east. This structure is three stories in height, with turrets and observatory, and is fitted with every modern convenience, with Turkish and electric baths, electric lights and telephone bells, all of which conspire to make this a desirable place to rest and recruit.

The building is surrounded by orange and lemon groves, and the terraces are beautified with flowers and olive trees, fountains and flowing streams, making this one of the most charming and attractive places we have seen."

This Institution is designed to meet the wants of the many invalids who desire medical treatment, or rest from business and change of atmosphere, at the same time to engage themselves either with moderate study, or with fishing, hunting, riding, driving, as suits the varied taste. The accommodations of boathouses on the bay, and equipages for driving will always be at hand for the private use of this Sanitarium.

A. M. L. P.



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